THE LANCET.

VOL. II.] LONDON, SATURDAY, MAY 5, 1838. [1837-8.

LECTURES
ON THE
THEORY AND PRACTICE OF MEDICINE;
NOW IN COURSE OF DELIVERY AT THE THEATRE OF ANATOMY AND MEDICINE, WEBB-STREET, SOUTHWARK.

BY

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&c., &c.

DISEASES OF THE RESPIRATORY SYSTEM.—*Organs of respiration. Discovery of the stethoscope. Different sounds of respiration; explanation of these sounds. Abnormal respiratory sounds. The voice and its modifications. Sounds produced by percussion. Diagnosis of diseases of the chest; their arrangement. Laryngitis and tracheitis; symptoms and treatment. Cases related by Dr. Baillie.*

GENTLEMEN:—My last lecture has given you a good idea of the treatment which you are to expect if any of you should make a decided improvement in our profession. Such an event will not, at the first at least, add to your happiness; it will, on the contrary, raise up a host of detractors,—reviewers, and the editors of reviews and journals, &c., who will not hesitate to insinuate, nay, even to assert, the most unfounded charges. Be not disconcerted, however, at these things; pursue the path of investigation, and of truth and honour, and these vipers will find at last, in your case, as in mine, that they do but bite against a file.

Having settled the various questions relative to the nervous system, I now introduce another and scarcely less important subject, —that of

THE DISEASES OF THE RESPIRATORY SYSTEM.

In teaching the *Theory and Practice of Medicine* I am persuaded that we ought to begin with a sketch of the *anatomy* and *physiology*, and proceed to the *pathology*, in its relation both to *function* and to *structure*; the *therapeutics* must be strictly adapted to the precise condition of the *disorder* or *disease*.

The organs of respiration consist of the larynx, the trachea, the bronchia, the air-cells, the cellular substance of the lungs, the lining mucous membranes, the nerves, the muscular tissue, and the investing serous membrane or pleura; lastly, the vessels of the arterial and of the venous circulation.

Each of these divisions of the anatomy has its appropriate physiology.

The diseases of the respiratory system could scarcely be said to be understood until the era at which Laennec's incomparable work appeared; the combination of auscultation and percussion constitutes the basis of the *diagnosis*, and the pathology is scarcely less indebted to that extraordinary man.

Besides auscultation and percussion, there are other important means of diagnosis: to watch the *sternal movements* of the chest, to examine the *form* of the chest, afford very valuable information.

Of the stethoscope, and of percussion, a very *useful* degree of knowledge may be obtained in a few days, or a very few weeks.

The stethoscope conducts sounds on two principles: the first is illustrated by placing a watch at one end of a long table and applying the ear to the other, when its tic is distinctly heard; the second is illustrated by the newly-invented flexible ear-trumpet; the voice articulated in the distant funnel is conveyed through the hollow tube into the ears. The two objects of the stethoscope are, indeed, to enable us to listen to the slight noises made in respiration without the immediate application of the ear, and to make the external meatus of the ear a continuous tube, as it were, with the larynx or actual organs of voice,—this latter object being effected whenever a cavity or enlarged bronchus exists immediately under that part of the parietes of the thorax to which the instrument is applied, or even when more deeply seated, if it be surrounded by lung made solid by inflammation, congestion, or clustered tubercles.

It was admirably remarked by the late Dr. Gooch, that, in making examinations

per vaginam, we have only to bear in our mind a clear idea of the anatomy of the parts, and the changes to which they are liable, to be enabled to pursue the examination with facility and satisfaction; in like manner it is only necessary to consider what are the relative positions of the organs contained within the thorax, with its parietes, to be enabled to detect with the stethoscope the different noises of the respiration and of the heart, and to ascertain their value as signs of health or as symptoms of disease. The student should first make himself familiar with the sounds of the respiration in health.

1. The respiration is heard to be *tubal* or *bronchial* over the larynx, the trachea, and the large bronchia situated at the root of the lungs, on applying the stethoscope over these parts respectively. It is also bronchial at the sides of the neck, and, in some degree, between the upper angles of the scapulæ.

Having familiarised himself with the healthy bronchial respiration, the student will readily detect its existence, as a sort of *error loci*, in disease. It is heard, for instance, in parts in which the respiration has usually the *vesicular* character, to be described immediately, and in cases in which the lung is rendered dense and impervious to air, and a good conductor of sound, such as hepatisation, congestion, hæmorrhage, effusion into the pleura. It is heard most distinctly at the root of the lung, where the bronchia are naturally largest, and the lungs most apt to be condensed by inflammation and effusion, and at their summit, where the bronchia are most apt to be preternaturally enlarged.

2. The respiration is *vesicular* over all other parts of the thorax, under which the cellular substance of the lungs exists. It is heard best immediately under the clavicle and in the axilla; and it is heard, in general, in the anterior, lateral, and posterior parts of the thorax.

The vesicular inspiration is rendered louder by breathing more rapidly. It is louder in infancy and early youth (then termed *puerile*) than in adult age, and in females and "nervous" men than in others.

It *becomes* puerile in cases in which one lung, or a considerable part of a lung, becomes promptly impermeable to air from acute disease, as inflammation, hæmorrhage, tubercles, or the presence of fluid effused into the cavities of the thorax.

It is plain that, when the respiration is heard all over the chest, the lungs are free from congestion, &c., and the cavities of the pleura from effusion; when it is absent from any part, then disease, or the effects of disease, exist. The student has only to familiarise himself with this idea and to listen to the thorax, with his understanding, as it were, as well as his ear. There is really no such difficulty in obtaining a *useful practical* knowledge and use of the stethoscope as is imagined by many persons. If we can hear at all we can hear altogether; it is only necessary to know what we are listening to.

It is quite obvious that if the larger and smaller bronchial tubes be either inflamed or obstructed by mucus, pus, or blood, various noises, or *rattles*, will be added to the ordinary noises of the respiration.

These rattles in the larger branches of the bronchia are *sibilant*, *sonorous*, or *mucous*, when these tubes are inflamed and more or less obstructed by thickening of their mucous lining, or by unnatural viscidity or abundance of mucus. Such rattles become diagnostic of bronchitis, and denote its existence, its diffusion, &c. Sometimes the mucus, &c., is so viscid or abundant as to close the bronchia entirely, and to suspend the respiration, this is then frequently removed by a fit of coughing, with expectoration.

When these rattles occupy the air-cells themselves, or the very smallest ramifications of the bronchial tubes, they are much modified, and are designated *crepitant*, *sub-crepitant*, *sub-mucous*, &c. Such a form of rattle exists in the earliest stage of pneumonia, in hæmorrhage, in œdema of the lung, &c.

Another form of rattle is termed *gurgling* or *cavernous*; it exists in cavities left in the lungs by the suppuration and expectoration of tubercles; it coincides with cavernous respiration, and with distinct pectoriloquy, to be noticed immediately.

To the forms of respiration aready mentioned, Laennec has further added the "*souffle*," or *blowing*. When the patient speaks, or coughs, the air seems actually drawn from, or propelled into, the ear. This sign indicates a cavity, or enlarged bronchia, surrounded by condensed lung, near the parietes of the thorax.

The souffle is sometimes modified by the sensation as of a *veil* interposed between a cavity and the ear—"*souffle voilé*." This phenomenon is observed in cases in which a vomica has its parietes thin, yet unequally so, and unadherent, or an abscess has its parietes of unequal induration, or a large bronchus is surrounded by lung partly condensed and partly natural, or nearly so.

Cough, like the respiration, is sometimes *bronchial*, sometimes *cavernous*, and is of course attended by the various rattles which have been already mentioned.

When we apply the stethoscope over the larynx, the trachea, or the large bronchia, and make the person speak, the *voice* seems to pass through the tube into the ear: it is laryngeal, tracheal, bronchial.

The voice passes, in like manner, from a bronchus surrounded by lung condensed by the pressure of fluid effused into the thorax, or solidified,—"hepatised,"—by inflammation, or from a cavity formed by suppurated

and expectorated tubercles, if this be situated near the parietes of the chest.

In the first case it is termed *ægophony*, from the resemblance of the sound to the bleating of a goat.

In the *second* case, it is called *bronchophony;* it resembles the voice heard over the larger bronchia.

In the *third*, it is designated *pectoriloquy*, and resembles the voice heard over the trachea.

All this is simple, and a little attention and practice will make it easy.

I have thus given a very slight *sketch* of the use of the stethoscope for the very beginners, who will now be prepared to enter into the subject a little more minutely.

In reference to bronchophony, pectoriloquy, and ægophony, it may now be added that pectoriloquy differs from bronchophony by its cavernous and circumscribed character, and it occurs in all cases of cavities, resulting from softened tubercles, abscesses, &c. It is *perfect* or *imperfect*.

Pectoriloquy is perfect when the voice passes through the stethoscope, from a space accurately circumscribed, and the cough, rattle, and respiration, combine to distinguish the phenomenon from bronchophony. It is imperfect when some of these phenomena are wanting, and especially the transmission of the voice through the tube. Perfect pectoriloquy denotes an ample and empty cavity, situated near the surface, with dense parietes, and in communication with one or more bronchia of considerable size, unobstructed by sputa.

With pectoriloquy, and especially bronchophony, *ægophony* may easily be confounded, without great care. It consists in a peculiar resonance of the voice, which accompanies or follows articulation; it seems as if an echo of the voice, of an acute, harsh, and silvery character, were heard at the surface of the lung, rarely entering, and scarcely ever traversing, the tube. It resembles the bleating of the goat, whence its name. In the vicinity of a large bronchus, bronchophony is frequently superadded.

In order to hear the ægophony well the stethoscope must be firmly pressed upon the chest, and the ear must be applied lightly. The phenomenon exists—1, in cases of *pleuritis*, acute or chronic, with a moderate effusion; 2, in *hydrothorax*. In these cases the sound on percussion is, at the same time, dull, and the respiratory murmur absent. The ægophony ceases when the fluid is either absorbed, or so augmented in quantity as to induce enlargement of that side of the thorax.

Ægophony is always heard over a certain space, and often between the scapula and spine, and across the thorax to the mamma, and not, like pectoriloquy, in one part only, evidently occupying the superior border of the effusion, where it exists as a thin layer of fluid, moderately compressing the bronchial tubes. The seat of ægophony is consequently modified by the quantity of effusion, and by pleuritic adhesion, and changed by the posture of the patient.

Ægophony and bronchophony are united in pleuropneumonia; and pectoriloquy may be conjoined with them in the case in which abscess is superadded.

In reference to respiration, the voice, cough, &c., it may be added that these are sometimes attended by a phenomenon termed *metallic tinkling*; the sound is precisely that of a glass struck by a pin. It is heard in respiration, but especially when the patient speaks or coughs; it exists in two cases:—1. in that of effusion into the pleura with pneumothorax, and a communication with the bronchia; 2. in that of a vast cavity in the lung only partially filled with thin pus. This sign is more distinct, as, in the former case, the fistula is larger, and the quantity of air greater.

Sometimes the sound is like that heard on blowing into a decanter; it is then termed *amphoric resonance*.

There is another sound heard by the stethoscope in the case of *inter-lobular emphysema*; it is that occasioned by the ascent and descent of the affected part of the lung against the pleura costalis. A similar phenomenon may exist in pleuritis, with moderate effusion.

I may sum up the principal *practical* points in the auscultation of the *lungs* thus:

I. *The Respiration is*
   1. Bronchial, or
   2. Vesicular.

II. *The Rattles are*
   1. Bronchial;
      a. Sibilant;
      b. Sonorous.
   2. Mucous;
   3. Sub-mucous;
   4. Crepitant;
   5. Cavernous.

III. *The Cough is*
   1. Bronchial; or
   2. Cavernous.

IV. *The Voice assumes the character of*
   1. Pectoriloquy;
   2. Bronchophony;
   3. Ægophony.

A very important source of the diagnosis is *percussion*, as first particularly noticed by Avenbrugger, and then by Corvisart. The operation requires a little use. A disc of ivory, or a half-crown piece, or the fingers, may be laid flat upon the chest, or the shirt may be drawn tight over it; or the fingers may be covered with a glove; percussion is then to be gently but briskly made with the very ends of the fingers, or the stethoscope. The next rule is to make a precisely comparative percussion of each side, and corresponding parts, of the thorax, extending the muscles. The fore part of the thorax is thrown

forwards by sitting perfectly erect, the head raised, and the elbows carried backwards; the back, by bending a little, holding the head down, and bringing the arms forwards. It is useful, in obscure cases, to pass to the other side of the patient and repeat the operation.

The natural sound of the thorax is clear on percussing the middle and sternal end of the clavicle; a little less so just below; a little less so still, between the *fourth* and *eighth* ribs, or in the mammary region. The sound is obscure over the liver, loud over the stomach.

Under the sternum the sound on percussion is clear. In the axilla, and immediately below, the sound is clear; between the *fourth* and *eighth* ribs, laterally, the sound is clear on the left side; but sometimes obscure on the right, denoting undue elevation of the liver; below the *eighth* rib, the left side is sonorous, the left side dull.

The interscapulary space gives an obscure sound, on account of the depth of the muscles, the space immdiately below the scapulæ is obscure on the right side, over the liver, and sonorous on the left, over the stomach.

When the sound of the thorax is unnaturally dull, the subjacent space, instead of containing the lung permeable to air, is occupied by the lung in a state of congestion or hepatisation, by serous effusion, by a tumour, &c. It is thus that *pneumonia, hydrothorax, hydro-pericarditis, tumour, hypertrophy of the heart, aneurysm*, &c., induce dullness of sound. It is when auscultation and percussion conjoin that each acquires its just value. Besides these two means of diagnosis of diseases of the lungs, it is frequently useful to *inspect* and even to *measure* the thorax; there is nothing, to me, more interesting than to lay bare the thorax and to watch its movements. In *inflammation* and in *disease*, the movements of the thorax are observed to be variously modified, and its form changed.

In *pleuritis*, the thorax, or a part of the thorax, is kept unmoved, according as the disease is diffused or partial, and the respiration is performed by the diaphragm alone, or by one side, or by one or several parts of the thorax only.

In *peritonitis*, the breathing is, on the contrary, thoracic, the diaphragm being motionless.

These modifications of the respiration are amongst the best diagnostics of *pleuritis* and *hepatitis*. I had noticed them before the discoveries of the Parisian school were laid open to us in 1814, a fact of which the Records of the Royal Infirmary of Edinburgh would bear ample testimony. In more *chronic pleuritis*, the thorax is not only kept immoveable, but is absolutely deformed, one side or one part being drawn and fixed inwards, the shoulder depressed and fixed, and the spine distorted. This phenomenon is occasioned by a deposit of a thick layer of lymph, with the effusion of serum, and the subsequent absorption of the latter. In excessive *hydrothorax*, on the other hand, the thorax, or the side of the thorax, is more rounded than usual, whilst the diaphragm is weighed down. The breathing is thoracic and high; the liver is frequently felt, carried downwards, below the false ribs. The thorax may be actually measured in these cases; but an inspection is generally sufficient, and even more satisfactory. The posterior part of the chest should be viewed, as well as the anterior.

In *emphysema* there is frequently an obvious enlargement above the clavicle of the side principally affected, a fact discovered by M. Louis.

It is scarcely necessary to mention that *aneurysm* is eventually visible externally in some cases.

The anatomy of these organs should be constantly borne in mind whilst we are pursuing their pathology; it presents us with a natural mode of arranging pulmonary diseases. But a still more practical mode of arrangement flows from viewing these diseases as *acute, chronic*, and *insidious*; to this, the former is very properly made subsidiary.

Nothing is more important in preparing for the events with which you must meet in practice, than a careful enumeration and classification of them. Let me particularly call your attention to the following arrangement of the diseases of the Respiratory System:—

THE ACUTE.

I. *Laryngitis and Trachéitis:*
   1. Injection;
   2. Tumidity;
   3. Exudation.

II. *Inflammation of the Epiglottis:*
   1. Redness;
   2. Slight thickening;
   3. Augmented and altered secretion.

III. *Pneumonia:*
   1. Diffused;
   2. Lobular;
   3. Central.
      a. Congestion;
      b. Hepatisation;
      c. Purulent infiltration;
      d. Abscess.
      e. Œdema.

IV. *Hæmorrhage:*
   1. Bronchial hæmorrhage;
   2. Pulmonary hæmorrhage, or apoplexy.

V. *Pleuritis:*
   1. Of one pleura;
   2. Of both pleuræ;
   3. Partial;
   4. Pleuro-pneumonia.
      a. False membrane;
      b. Serous, puriform, hæmorrhagic effusion.

VI. *Gangrene (diffused).*

THE CHRONIC.

I. *Laryngitis and Tracheitis.*
II. *Bronchitis:*
1. Mucous; dilatation of the bronchia;
2. Pituitous;
3. Dry; emphysema; asthma;
4. Symptomatic.
III. *Hay-asthma.*
IV. *Pneumonia.*
V. *Pleuritis:*
1. Serous, flocculent, or puriform effusion;
2. Effusion, with dilatation of the chest;
3. Absorption, with contraction of the chest;
4. Displacement of the heart.
VI. *Gangrene (circumscribed.)*
VII. *Emphysema:*
1. Vesicular;
2. Interlobular.
VIII. *Asthma.*
IX. *Œdema.*
X. *Hydrothorax:*
1. Idiopathic;
2. Symptomatic.
XI. *Pneumothorax.*

THE INSIDIOUS.

I. *Ulceration of the Larynx, Trachea, or Bronchia.*
II. *Tubercles:*
I.—1. Of the lungs;
2. Of the pleura.
II.—Complications.
III. *Melanosis.*
IV. *Encephalosis.*
V. *Scirrhus.*
VI. *Cysts, Hydatids, &c.*
VII. *Symptomatic Affections.*

THE ACUTE DISEASES.

I.—Laryngitis and Tracheitis.

The profession are chiefly indebted for the knowledge of this disease, as it occurs in *adults*, to the late Dr. Baillie, and to Dr. Farre.—(*See* "Trans. of a Soc. for the Imp. of Med. and Surg. Know., vol. iii. p. 275, 1809; Works by Wardrop, vol. ii. p. 54; and Med. Chir. Trans. vol. iii. p. 84 and p. 323, 1812.)

1. *The History.*—This perilous affection comes on rather insidiously, with the feelings and appearances of slight sore throat, from exposure to wet and cold. Of the three cases given by Dr. Baillie, two occurred in the persons of eminent physicians, viz., Dr. David Pitcairn and Sir John Macnamara Hayes. "They had both been more or less subject to inflammation of the thorax." Both cases, with a third, and with other slighter cases, "occurred in one season and near each other."

2. *The Symptoms.*—With a blush of inflammation about the fauces, there is, very soon, a sense of stricture about the larynx, and a sonorous yet hoarse respiration, voice, and cough, the inspirations being long and difficult. After another short interval, there is increased dyspnœa, with the imminent danger of suffocation, restlessness, great distress, starting of the eyes, and perhaps delirium; with these symptoms, referrible to the larynx or trachea, there are a small pulse, paleness of the face, dilated pupils, and obvious danger of sinking of the powers of life. When the disease is seated about the rima glottidis, there is dysphagia; when lower down in the larynx, there is still hoarseness or loss of voice; symptoms which are absent in tracheitis, when distinct from affection of the larynx. Generally the patient can lay his finger on the seat of the stricture and of dyspnœa. Dr. Pitcairn "had an uneasy feeling in the larynx, and wrote on a piece of paper that his complaint was croup." Dr. Farre's patient answered his inquiry respecting the seat of his suffering, "by putting his finger on the superior part of the thyroid cartilage."

3. *The Morbid Anatomy.*—In acute laryngitis the velum and tonsils are somewhat inflamed; the epiglottis thickened; the lining membrane of the larynx inflamed, thickened, and with puriform fluid in the sacculi; that of the trachea being also, but less, inflamed. These appearances were seen in the cases of Dr. Baillie and Dr. Farre.

Such is a general view of the symptoms, &c. in acute laryngitis; to this view I think it most important to add an abstract of the two cases detailed by the accurate pen of Dr. Baillie:—

Case 1.—D. P. had been subject to quinsey, which had readily yielded to bleeding, purging, and abstinence. On April 13th, 1809, he had sore throat, which appeared slight; he was worse on the 15th, and confined to bed on the 16th. "I was *sent for*," says Dr. Baillie, "at 10 P.M.; he spoke thickly in his throat, his skin was hot, his pulse frequent; he was bled by his own desire, and the blood proved buffy; he had taken opening medicine and applied a blister. *There was no suspicion of danger*, During the night the symptoms became more violent, and many leeches were applied to the throat. At 11 P.M. on the 17th, he was sitting up, but he was pale, his pulse feeble and unequal, and his voice almost lost; there was some dyspnœa, but this was without noise or spasm; he had, however, an uneasy feeling in his throat, and wrote down on a piece of paper that, his complaint was to be considered as croup; the tongue and velum were much swelled; there was great dysphagia. About 4 P.M. he was in bed, his pulse regular, and not weak or frequent; he was breathing with difficulty, and was a little drowsy. *He appeared better.* About 8 P.M. he became suddenly worse, and in less than half an hour expired.

"On the 19th of April, the second day after his death, at 12 o'clock, the body was examined by Mr. Brodie, in the presence of Dr. Wells, Mr. Home, and myself. The tongue, was found still considerably swelled, but not in the same degree as during life, and its under surface was of a red colour. The posterior and upper surface of the tongue was also red but in a less degree. The velum pendulum palati, and the tonsils, were inflamed, but were not much swelled. The tonsils contained no pus. The epiglottis was at least twice as thick as it is in health, and stood more erect than usual. When the inner surface the larynx was examined, the membrane which lines it was found to be much inflamed, and somewhat thickened, and a small quantity of a thick purulent fluid was found in the sacculi laryngis. The inner membrane of the trachea was likewise found to be inflamed, but not in the same degree as the inner membrane of the larynx. The lungs were sound, but did not collapse upon taking off the sternum, and the anterior extremities of the ribs. Some slight marks of disease were found in the coats of the aorta, but these had no connection with the disorder of which the patient died."

Case 2.—I. M. H. was taken ill on July 16th, 1809, called on Dr. Baillie and complained of uneasiness in the larynx; the uvula and arch of the palate appeared slightly redder than natural. The patient, however, was a good deal anxious about himself, because he had laboured under an inflammation of his throat about fifteen years before, which had nearly proved fatal. Seven leeches were applied, and an aperient given. The next day he was a little worse; but he was without dyspnœa, and the pulse was little accelerated. Twelve ounces of blood were taken from the arm, and a blister applied. During the day he was bled, at his own desire, three times, and lost between thirty and forty ounces of blood. In the evening he was still worse; his breathing was becoming laborious, and attended with a noise referrible to the larynx. An emetic, &c. were prescribed. On the morning of the 18th, he was still worse; in the evening, at 6 P.M., worse still, with dyspnœa and threatenings of suffocation. Ninety drops of laudanum and the warm bath were administered during the evening. Tracheotomy was proposed. At ten he was easier. In the night time, the patient becoming much worse, Mr. Tegart, who scarcely ever left him either day or night, sent for Mr. Home and Mr. Wilson to perform the operation of bronchotomy. Mr. Wilson was out of town upon professional business, but Mr. Home came about four in the morning. The patient, however, was beginning to sink, so that no advantage from an operation was now to be expected. I was called up at five, and found the patient in a dying state. He expired at six o'clock in the morning of the 19th of July.

"Early on the 20th, the body was examined by Mr. Home, Mr. Wilson, Mr. Tegart, Mr. Brodie, and myself. The posterior part of the upper surface of the tongue was a little red, but the tongue was not increased in thickness. The tonsils, and the velum pendulum palati were slightly inflamed. The epiglottis was much thickened, and stood erect, so as to leave the cavity of the larynx altogether uncovered. The inner membrane of the larynx was much inflamed and thickened, and there was a little thick purulent fluid in the sacculi laryngis. When the cut edges of the larynx, which had been slit behind, were brought in contact with each other, the cavity of the glottis was found to be almost obliterated, by the thickening of the inner membrane of the larynx at that part. The inner membrane of the trachea was likewise inflamed, but in a less degree. The lungs did not collapse upon opening the chest, but were sound in their structure."

These cases are replete with interest and instruction; they teach us how insidious this terrible malady may be, and how prompt we should be in having recourse to the only mode of arresting death.

Such is, perhaps, the most common form of laryngitis and tracheitis in *adults*. But there are other forms which must be mentioned in this place. In different instances there are:—

1. Œdema of the glottis.

2. The effusion of mucus, of a puriform fluid, or of a concrete layer of lymph from the lining membrane of the larynx or trachea.

3. A layer of lymph lining the nostrils, the soft palate, the tonsils, the pharynx, the larynx, the trachea. The cases detailed in the valuable Mémoire of M. Louis were of this kind.

4. A *sloughy* condition of the fauces, the velum, the tonsils, &c.,—an insidious and terrible disease occasionally seen in *children*.

IV. *The treatment.*—In the pure form of laryngitis and tracheitis we must *first* bleed promptly to incipient syncope, watching the effects and being guided in our future proceedings by the quantity of blood which has flowed; we must *next* administer mercury in such form and manner as may most speedily induce free ptyalism; the pilula and the unguentum must be administered, the former with the pulvis antimonialis; in the *third* place we must employ local bloodletting, with fomentations.

In the midst of this treatment we must be prepared to perform the operation of *tracheotomy;* this operation, to be either safe or effectual, must be performed *early;* it is *too late* when the countenance is pallid, livid, and cold, and the pulse sinking.

In œdema of the glottis the most prompt

measures are required, but especially *tracheotomy*.

In the case of a deposit of a layer of coaguable lymph this is sometimes expectorated through the natural opening of the larynx, sometimes through that made by the operation into the trachea.

The cases detailed by M. Louis occurred principally in the course of other diseases, viz. typhus, phthisis, chronic pleuritis, "gastro-enterite;" its treatment depends consequently upon that of the original disease; the affection was constantly observed to proceed from *above, downwards*, so that it would be most important to arrest its course by such applications as the nitrate of silver. In spite of local bleeding by leeches and mercury, one out of eight patients only survived.

In the cases of *slough*, I am led, by a recent case, to think that the quinine, promptly followed by mercury, is the remedy which affords us the greatest degree of hope of cure.

Before I conclude this subject I must just notice the case of

II.—Inflammation of the Epiglottis.

Three examples of this disease are given by Sir Everard Home in the "Transactions of a Soc. for the Imp. of Med. Knowledge," vol. iii., 260. The symptoms were uneasiness in the throat and difficulty in swallowing and of breathing, without swelling of the tonsils, or of inflammation of the velum or uvula. On a careful examination the epiglottis was found reddened and enlarged.

But I must leave the further notice of this subject until my next lecture.

LECTURES
ON
MATERIA MEDICA AND THERAPEUTICS;
NOW IN COURSE OF DELIVERY
AT THE
WINDMILL-STREET SCHOOL OF MEDICINE.
BY
GEORGE G. SIGMOND, M.D.

CAMPHOR—LAURUS CAMPHORA.

Camphor.—Cinnamon.—*Plant from which the drug is derived. Mode of distillation. It is an element of vegetable life. Properties of camphor; medicinal powers of the drug. The camphor mixture; compound tincture of camphor.* Cinnamon.—*Botanical description of the tree; appearances of the bark. Preparations in use.*

Gentlemen:—This is designated in our present Pharmacopœia as a peculiar concrete obtained from the laurus camphora, and purified by sublimation. We have, however, every reason to believe, that a large proportion of that which we receive from India is the product of a different tree, the dryobalonops camphora, a native of the islands of Borneo and Sumatra. The College of Physicians has thought it right, until our knowledge upon the subject is more complete, to adhere to the generally received opinion, that it is principally obtained from the laurus camphora of Linnæus, a fine forest tree, that grows wild in Japan, in China, and likewise in North America. It bears a very striking resemblance to the laurel that yields cinnamon, from which it differs in the leaves, which stand on long footstalks, are acuminated at both extremities, and are two or three inches in length; the flowers are white, on simple, long, lateral branches; the berry is small, ovate, dusky, or brownish red. The dryobalonops frequently attains the height of ninety feet; the leaves are apposite below and alternate above, elliptical, supported on short pedicles; the flowers form a kind of panicle at the end of the branches; the stamens are numerous, and there is but a single pistil; the capsule is ovate, one-celled, and three-valved; the seed is solitary.

Kæmpfer, who was the first who pointed out that a portion of the camphor of commerce was derived from this source, remarked, that it was found in the cavities and fissures in the trunk of this tree. The natives, when they search for the camphor, make a deep incision in the trunk, about fourteen or eighteen feet from the ground, and if they discover the object of their examination, they then fell the tree to the ground, cut it into junks of a fathom long, in order to allow of the extraction of the crystalline masses. That which is obtained from the laurus camphora is extracted from the roots, the wood, and the leaves, and the roots yield up by far the largest quantity. The distillation takes place in large iron pots, to which earthen heads have been adapted, which are stuffed with straw, and provided with reservoirs. The greater proportion of the camphor becomes condensed in the solid, from amongst the straw, whilst another portion comes over with the water. The camphor thus obtained undergoes the process of refinement, which is performed by sublimation, in low, flat-bottomed glass vessels, placed in a sand-bath, and the camphor becomes concrete in a pure state, against the upper part, whence it is separated, after breaking the glass.

Various are the opinions as to the necessity of mixing quick lime previous to distillation. Lewis says that no addition is necessary, and all that is required is to manage the fire so that the upper part of the vessel may be hot enough to bake the sublimate together in a cake. The Venetians, who first introduced camphor into Europe, are said to mix one-twentieth of its

weight of quick lime; and Chaptal says that the Dutch, who had long the monopoly in Europe, mix one ounce of quick lime to every pound of camphor. Mr. Gray states, that two pounds of quick lime should be added to each hundred weight of rough camphor, and that the sublimation should be performed by a gentle heat.

We now find that not only is camphor the produce of peculiar trees, but that it is, also, one of the immediate principles which enter into the composition of vegetable life; and we have had a series of investigations performed by many eminent chemists, from which we learn its existence in a vast number of plants. Slare and Ludovic first demonstrated it in oil of canella, that had long been kept. Kunckell observed it in the viscid oil of anniseed and rosemary; Cruger in some oil of majoram, that had retained much of its characteristics upwards of twenty-seven years. Geoffrey carried these researches still further, and ascertained the presence of camphor in a vast number of essential oils; and he pointed out the fact, which has since been confirmed, that the essential oils of thyme, of rosemary, of marjoram, deposit, when long kept, this aromatic principle. It is to be obtained from the roots of zedoary, sassafras, canella, elecampane; and Fourcroy states, that he found very evident traces in the root of valerian.

Proust, formerly Professor at Segovia, has, with great nicety, described the progress by which it may be obtained from various volatile oils, which exist in various labiated plants, growing very abundantly in the South of Spain; the higher the temperature the greater is the quantity of the camphor deposited. M. Boullay has, in the "Journal de Pharmacie," started some doubts as to the identity of the camphor, believing the produce to be only analogous to it. Several plants have so strongly the camphorous aroma, that their adjective name has been derived from it; such are the osmites camphorina, the unxia camphorata, the tarchonanthus camphorata, and several of the compositæ, abound in this odour.

Grunow, in the year 1780, drew up a very interesting memoir on the plants that furnish camphor, besides the camphor laurel. An artificial camphor has been obtained by the transmission of hydrochloric acid gas, through the oil of turpentine, by Kind, who published the process in the "Annales de Chimie;" and Houton Labillardiere has, in the "Journal de Pharmacie," repeated the observations; from this Thenard drew the conclusion, that camphor was only a compound of essential oil and a vegetable acid. It is found in the Pharmacopœia of Van Mons, without any reference to its medicinal powers. Camphor, in a high state of purity, is a white, concrete, transparent substance; it is unctuous to the touch, breaking with a shining fracture; its specific gravity is less than water, upon which it floats, and small pieces thrown upon it are agitated, and move about with singular rapidity, which is immediately put a stop to by dropping a small quantity of oil upon it. It has a bitter, pungent, acrid, hot, penetrating taste.

It has a very strong, peculiar, aromatic odour, of which much has been said from a very early period, and is believed to the present day, for it is said to possess the striking power of allaying ungovernable passion, of tranquillising the feelings, and of preserving chastity. In the old school of Salernum this verse was amongst the universally received adages:—

Camphora per nares castrat odore mares.

Some years since great laughter was excited in one of our courts of judicature, from the evidence of a witness, on a trial for an elopement, by the assertion that at a particular stage of the journey the fair lady threw out of the window the camphor-bag, on which she had depended for her preservation against the warm entreaties of her ardent lover. The calming and sedative properties of the odour of this drug has led to its introduction in some soaps, such as that of Nuremberg, in the white ointment of Rhasis, and its effects have been highly estimated on the Continent.

Camphor is highly volatile; it is also fusible; when placed in contact with a burning body, it takes fire very rapidly, and burns with a white flame and copious fumes. It is of great use in the arts, as a combustible substance, and forms the basis of those compositions which have been made to burn under water, and by which it was once proposed, during the time of war, to set fire to ships. It is supposed to have entered into the celebrated Greek fire. Thomson, in his analysis given in the "Annals of Philosophy," states, that it is composed of 738 parts of carbon, 144 of hydrogen, and 118 of oxygen. We find it of very great value in defending the different articles deposited in museums, in herbariums, from the attacks of insects. All animal matter appears to be preserved by it; hence its use to guard fur and feathers from destruction. It is employed as an antiseptic, and in embalming. It is likewise used in the arts for assisting in the solution of resins; it is scarcely soluble in water. Cadet de Gassicourt says, that a French pint of water dissolves about sixteen grains. Jahn states, that an ounce of boiling water dissolves a grain, and cold water half a grain; it gives to it, however, when properly triturated, its odour and its pungency; its solubility is very much increased by the addition of carbonic acid gas. It is capable of being sus-

pended in water, with the assistance of gum and of yolk of egg. It is very soluble in alcohol, in ether, in the fixed and the volatile oils, in the acids, excepting the nitric acid, which only dissolves a portion of it, and alters the other part, which swims upon it, and has been called the oil of camphor, and which has been attempted to be medicinally employed.

Camphor produces several very extraordinary phenomena upon the human body, when internally taken; and I have had occasion to relate to you what were the effects of an injection of half a drachm of camphor. Mr. Alexander made some very curious experiments upon himself with several drugs, and, among others, with camphor. Having ascertained that no ill effects were produced upon him by swallowing a scruple, he took no less than two, mixed with syrup of roses, in a single dose; before twenty minutes had elapsed, languor and listlessness occurred; then giddiness, confusion of ideas, and forgetfulness; all objects appeared to move before him, and a singular state of mind, terminating in unconsciousness; during this he was attacked by strong convulsions and frenzy. Dr. Monro was called in, and by accident ascertained what had been taken; he immediately gave an emetic, which brought away almost the whole of the camphor that three hours before had been swallowed. Some time elapsed before the mind altogether recovered its wonted state of tranquillity.

Professor Wendt relates an instance of a drunkard, who took no less than four ounces of camphorated spirit, or a hundred and sixty grains, which had been intended as an embrocation; his symptoms were very violent, but he recovered, from the use of almond oil and vinegar, and there was no attempt at vomiting; and Hoffman gives us the case of a man who had swallowed by accident two scruples of camphor, dissolved in olive oil, which brought on delirium, vertigo, diminution of animal heat, somnolency, to which succeeded increase of heat, accelerated circulation, and red-coloured urine; he gradually recovered. Different have been the opinions as to its power: Cullen calls it a sedative, Bergouzi a stimulant, and Coruzzi a counter-stimulant. Hoffman endeavoured to introduce camphor into general practice, and wrote "Dissertatio Medica de usu Camphoræ interno Securissimo et Præstantissimo," which first attracted the attention of the profession, for although previously there had been some physicians who had prescribed it, camphor was by no means a favourite; it was "a cold medicine, and rejected," as Dr. Lyons tells us, "upon that account, but more especially, as it was thought, to extinguish all inclination or aptitude for love."

It was in fever of a malignant character, that in the quantity of ten or twelve grains on the eighth, ninth, and eleventh day, to patients labouring under delirium, fluxes, hæmorrhage, petechiæ, that it was most successful, according to Riverius; and Hoffman gave it at the very onset of fever. It has since been used, with great success, in fevers of the typhoid kind, in the dose from two to fifteen grains; it has been also given in the different exanthemata, when they have appeared in their worst forms.

Avenbrugger, to whom we are so much indebted for the hints given us, which have led the way to the diagnosis of thoracic disease, published his "Observations on the Specific Powers of Camphor in the Cure of Mania," in the year 1776. Dr. Kenneer, in the "Philosophical Transactions," mentions four cases of cure of insanity, effected by means of this drug. Fodère speaks of it as quieting the nervous system, and unites it with bark; there have been others who have denied its possession of any power over mania; amongst these Dr. Ferriar and Dr. Laughar. Still, previous to the paroxysm of mania, when the premonitory symptoms announce the accession of violence, camphor should invariably be administered, and from twenty-four to forty-eight grains in the course of the day, may be safely used. It has been recommended in hysteria and in epilepsy; but there ought to be great hesitation, as little doubt exists that it has produced the last of these diseases. In 1811 a dissertation on this subject was read before the Faculty at Paris, and epilepsy was attributed to the use of this remedy. In such cases it is evident that previous evacuations are necessary, and it has been generally observed, that where constipation is present camphor is rather prejudicial than otherwise. Dr. Lysons always recommended after evacuation ten grains of nitre in combination with camphor, and as it produces thirst a quantity of some diluent drink afterwards, and he speaks of it as a remedy, then, of the greatest value.

In puerperal mania camphor has been largely and successfully employed; and Professor Berndt has recommended it in large doses; he found such decided benefit from it, after many fruitless attempts to combat the disease by antiphlogistics, ether, stimulants, and other remedies, that he was induced to consider it as a real specific; he, however, recommends the application of leeches to the head, and also to the inside of the thighs, in cases complicated with congestion, and in plethoric constitutions. In gout and in rheumatism this remedy has obtained some degree of reputation; and more lately, in France, it has been tried in these diseases in the form of vapour. M. Delormel and M. Dupasquier have published, in the French journals, the results of their experience. One of the most useful alleviators of pain during menstruation is camphor,

triturated with sugar; and in the dose of ten grains in the course of the day, it allays that high degree of suffering to which some females are subject during the periodical excretion. It has some claims to our considerations in various affections of the mucous surfaces in which catarrhal discharges occur.

The camphor mixture of our Pharmacopœia is one of the most serviceable vehicles we possess for the administration of a great number of the most active remedies, which it renders less likely to be the cause of irritation, from its gentle sedative influence. Although the quantity of the drug that is contained is very small, it produces a very marked impression upon the nervous system; and while it corrects the too energetic action of a number of our therapeutic agents, it assists others; thus it increases the action of the infusion of senna and of rhubarb, the decoction of aloes and of taraxacum, while it moderates the action of the infusion of digitalis, or of tobacco. It is of infinite importance where medicines are to act upon the kidneys, or upon the urethra; hence, where the infusion of buchu, preparations of squills, of copaiba, or of turpentine, are to be used, it is to be prescribed. The greater number of the diffusible stimuli, too, are heightened by it; thus, combined with the liquor acetatis ammoniæ, with the compound spirits of lavender, with nitrous ether, it assists, corrects, and improves them.

Our camphor mixture is formed of half a drachm of camphor, rectified spirit, ten minims, and of water a pint; rub the camphor first with the spirit, then add the water gradually, and strain through linen; although the whole of the camphor is not taken up, yet there is the aromatic odour, the taste given to the water, and quite as much of its medicinal power as is necessary. Of this most valuable mixture two ounces may be given every three or four hours. The old camphor julep, the favourite remedy of every Lady Bountiful, for every disease in her parish, was thus made of camphor, one drachm, of the finest sugar, half an ounce, boiling water, one pint; grind the camphor first with a little rectified spirit of wine, till it become soft, and then with the sugar till it be perfectly mixed; afterwards add the water by degrees, and filter in a close vessel; if the composition be rubbed with twice its weight of gum arabic, it mixes well with the water. The emulsio camphoræ of the Edinburgh Pharmacopœia, supplies the place of this formula:—Take of camphor, a scruple, sweet almonds blanched, refined sugar, each half an ounce, water, a pint and a half, and make it in the same manner as the common almond emulsion.

These are of use when blisters are applied; they prevent irritation in the urinary passages. Though doses of camphor have been known to produce strangury, of which Heberden quotes two examples; these have been said to have the power of preventing the contagion of small-pox, of reproducing eruptions that have been repelled, of preventing the narcotic influence of opium; and all these preparations of camphor have their great admirers. Some medical men declare the common camphor mixture to be the only vehicle in which medicines that are to act as diaphoretics can, with a firm reliance on their action, be administered, without, from long continuance, a diminution of their efficacy.

The compound tincture of camphor is a useful anodyne, a fluid ounce containing nearly two grains of opium; it is the old paregoric elixir, and is formed of two scruples and a half of camphor, of powdered opium, and benzoic acid, each seventy-two grains; oil of aniseed, a fluid drachm, proof spirit, two pints; these ingredients are macerated together for fourteen days, and then strained, and the dose may be one or two drachms. The tincture of camphor is rarely used, and then only externally, to excite the cutaneous vessels into action where they have been long torpid; it is hence used occasionally to chilblains, more especially when the itching is very severe; in chronic rheumatism, in slight indurations around the joints, in local swellings, in numbness, in paralysis, it has been sometimes used. It is made of five ounces of camphor and two pints of rectified spirits; these are mixed, that the camphor may be dissolved. Whatever may be the difference of opinion as to the nature of the action of this substance, when it is internally administered, there seems to be but one judgment formed of its very great utility as an external application, and it has some discutient as well as anodyne powers, and liniments formed from it are amongst the most popular remedies we possess; dissolved in oil, in alcohol, or acetic acid, it is used for a vast variety of purposes, for bruises, for inflammation, for chronic rheumatism, for indolent swellings, for infiltrations into the cellular substance; it is employed in poultices for dysentery, for flatulent colic, for chronic indurations of the liver: in the last disease, Maldonade has found it singularly serviceable. It has been employed with much success in promoting the secretion of milk after delivery; and a small bag, containing camphor, placed between the mammæ a few hours after the event, has been the practice pursued in France, on the recommendation of M. Dalle. The camphor liniment of London is formed of half an ounce of camphor dissolved in two fluid ounces of olive oil. This, with the addition of half an ounce of the solution of sesquicarbonate of potash, it appears, was recommended by Mr. Ware to be applied to the eyelids night and morning in incipient

amaurosis. The compound camphor liniment is thus made:—Take of camphor two ounces and a half, solution of ammonia, seven fluid ounces and a half, spirit of lavender, a pint; mix the solution of ammonia with the spirit; then, from a glass retort, by a gentle heat, distil a pint; lastly, in this dissolve the camphor.

As an enema for worms, and for affections of the rectum, it has been used, but requires to be prescribed with much caution. Heberden mentions that thus administered it brought on pains resembling labour in a female; and I have mentioned to you the case of Dr. Edwards. Very shortly after the exhibition in this form, the taste is decidedly camphorous, and the breath exhales the characteristic odour, showing the rapidity of the imbibition and circulation throughout the whole of the system. It likewise may produce strangury in this form, as well as in others. It is a singular fact, that it both produces and relieves this disorder.

CINNAMON.—LAURUS CINNAMOMUM.
LAURUS CASSIA.

Cinnamon, from the earliest records we have, was prized as the most delicious perfume of the ancients, and it has engaged the attention of classical scholars, of naturalists, and of physicians, in modern days; and the situations in which the tree grows have been made the subject of very considerable inquiry. It appears that it is a native of Ceylon, and that it does not flourish much beyond the Torrid Zone. Upon the authority of Spelman, it is said to grow in Tartary; but it is now ascertained that it does not grow in China, Sir George Staunton having observed that none of the laurel family, with the exception of the camphor tree of which I have just spoken, are found there. It is cultivated in many parts, both of the East and West Indies. It has long been introduced into this country; in 1768, it was in the garden of Mr. Miller at that period, and in the gardens belonging to the Bishop of Winchester, at Farnham; it has been raised from seeds, and ripened in the hot house. In "Thomson's Annals of Philosophy" will be found, in the tenth volume, the best details of the cinnamon tree and its preparations, drawn up by Henry Marshall, Esq., who, having been staff-surgeon in the Island of Ceylon, had ample opportunities of becoming familiar with all the circumstances connected with the growth, and the manner of obtaining this interesting spice.

The tree grows to the height of twenty to thirty feet; it has a slender trunk, covered with an ash-coloured scabrous bark; an immense number of branches are given off from it, which causes it very much to resemble the Portugal laurel. The inner bark is of a red colour; the bark of the young shoots is very often beautifully speckled with dark-green and light orange colours; from the root and from the branches an abundant quantity of camphor exudes. The leaves are in nearly opposite pairs; when young they are of a bright-red, or liver-colour, but as they acquire maturity they become olive, then bright-green, and, before they fall off, olive-yellow; they have then a strong aromatic odour, and the biting hot taste of cloves; the flowers are in axillary and terminal panicles, white, without odour, or sometimes fœtid; there are six petals. The filaments are in threes, shorter than the corolla, and the anthers are double. The fruit is an ovate berry, larger than a black currant; when ripe the skin is blueish-brown, thickly scattered with spots; beneath the skin is a greenish pulp, which is slightly acrid; has a terebinthinate odour, and a taste resembling that of the juniper berry. This incloses a nut, containing an oily, soft, pale-rose coloured kernel. By one of those extraordinary combinations which Nature has adopted for the propagation of some of the most valuable plants, this tree is rapidly spread over the thickest and the most impassable jungles, for crows and wood-pigeons devour these berries with the greatest avidity, most probably feeding upon the pulp, whilst the seed passes through the intestinal canal not only uninjured, but from the animal heat, and from the mixture with other matter, highly prepared for germination; and thus is the valuable cinnamon tree preserved for our use, and propagated even where the labour of man may not be available. The artificial cultivation, however, of the cinnamon, in consequence of the demand for it in all ages and in all countries, has attained a considerable degree of perfection, and requires great attention. Dr. Marshall has given us the details of preparing for a cinnamon plantation, which are exceedingly interesting, and I only regret that my time does not permit me at present to enter into them, for the circumstances attendant upon the growth of any plant reared for commerce are particularly curious. They generally illustrate some of the laws of nature with regard to vegetation, and show us what the care, the skill, and the industry of man can accomplish. As the peeling the bark in which the virtue resides is of importance, I must not completely pass it by, but state to you that most useful act.

The peeling commences early in May, and continues until October. The rains which precede this season are of value, because they dispose the bark and the wood to separate easily. The cinnamon harvest begins by the division of the peelers into parties under the direction of an inferior superintendent; a few of the party cut shoots, others are employed in the peeling-shed to remove the bark and prepare the cinnamon. When the Chaliah perceives a tree with shoots of a proper age, he strikes the ketta, which resembles a small bill-hook, obliquely into

a shoot; he then gently opens the gash, to discover whether the bark separates easily from the wood; if it does not, it is not thought fit for cutting. The chaliahs seldom trust implicitly to any external mark; but they seldom try a shoot until the scarlet leaves have assumed a greenish hue. Some plants never become fit for decortication. To remove the bark, the peeler commences by making, with his kokette, or peeling knife, through the bark, a longitudinal incision, of which the length is determined by the figure of the shoot. A similar incision is made on the opposite side of the shoot; and when the branch is thick the bark is divided in three or four places. The kokette is next introduced under the bark, which is gradually separated from the wood and laid aside. These sections of bark are carefully put one into another, the outer side of one section being placed in contact with the inner side of another, and are then collected into bundles and firmly pressed or bound together. In this state the bark remains for twenty-four hours, during which a slight fermentation occurs which facilitates the removal of the cuticle. The interior side of each section of bark is placed upon a convex piece of wood, and the epidermis, with the greenish pulpy matter under it, is carefully scraped off with a curved knife.

The bark dries, contracts, and gradually assumes the appearance of a quill or pipe. In a few hours from the time the cuticle is removed, the peeler commences to put the smaller tubes into the larger, and also introduces the small pieces. By this means a congeries of quills is formed into a pipe which measures about forty inches long. The cinnamon is suspended in the peeling-shed upon open platforms, for the first day, the second it is placed in the sun on wicker shelves to dry. When sufficiently dry it is collected into bundles of about thirty pounds weight each, and in this state deposited monthly in the Government magazines at Colombo or Galee. When newly prepared cinnamon has a most delicious odour, which gradually becomes fainter. After it has been deposited in the warehouse the inspection, under the authority of the East India Company, commences; it is sorted into a good and bad quality; the bark of the large shoots or thick branches produces coarse cinnamon; it has a reddish-brown colour, rough surface, and loose texture, this, and also the produce of very young and succulent shoots, which is light straw coloured, and thin, is rejected; mildewed, half-rotten, and smoky cinnamon is likewise rejected. This state is often brought on in consequence of the peelers having been obliged to take shelter during rain in caves or confined huts, where they were obliged to kindle fires. Adulterations are sometimes practised; thus, to give weight the peelers sometimes stuff the cinnamon quills with sand or clayey earth; an oil of cinnamon is sometimes extracted from the indifferent specimens. Cinnamon bark should have a reddish-brown colour, should splinter when broken, have a fragrant agreeable odour, a sweetish aromatic taste. The term cassia has been employed by different authors in various ways, it has been applied to the produce of the laurus cassia, or bastard cinnamon tree, to the bark obtained from old branches of the laurus cinnamomum, and also to distinguish the cinnamon yielded by different laurus cinnamomum elsewhere than in Ceylon, from the idea that that which is produced in Ceylon is superior to all others.

Many assert that the laurus cassia is a variety of the cinnamon, and not a different species. It seems, however, from the figure drawn by Nees Von Essenbeck, to be another species, and from Mr. Marshall's description, it is the canella de matto of the Portuguese, the wild caneel of the Dutch, and the laurus myrrha of Lauriero. The cassia bud of commerce is said to be the fleshy hexangular receptacle of the laurus cinnamomum. As a medicine cinnamon does not alone produce any very striking effects; but it is a most useful auxiliary and a grateful adjunct to many drugs whose power it does not diminish, but by reconciling, as it were, the stomach to their nauseous taste and influence, renders their action more certain. Many of those preparations which are found so grateful in disordered states of the intestinal canal owe their energy to the presence of this agreeable aromatic; there are states of nausea which are quite as dreadful to be borne as actual pain, in which this is highly serviceable. After very active diarrhœa and tormenting dysentery it has been found a most efficacious remedy. It soothes the stomach, it prevents sickness, it acts as a gentle stimulant, and gently restrains the inordinate action of the bowels. The common cinnamon water of the shops is sometimes most useful as a mild astringent and comforter to the intestinal canal, and with a few drops of laudanum, or of hyoscyamus, will quiet the whole digestive apparatus, after very severe evacuations. This is directed to be made of cinnamon, bruised, a pound and a half, or oil of cinnamon, two drachms, proof spirit, seven fluid ounces, water, two gallons; let a gallon distil. A simple infusion of cinnamon in boiling water, is a popular remedy in diarrhœa. The spiritus lavandulæ compositus, the spiritus ammoniæ aromaticus, the spiritus cinnamomi, the tinctura cinnamomi, the tinctura cardamomi compositæ, the tincturæ lavandulæ compositæ, all contain cinnamon, and are most agreeable diffusible stimuli; they are very frequently prescribed, and though alone none of these preparations can be classed amongst the highly efficacious

remedies, they assist in rendering others useful and agreeable.

All these formulæ, however, require care and attention in their exhibition, and in all states of stomach they are not admissible; the great objection at all times to be raised to the administration of these tinctures and alcoholic fluids is that at last they cannot be dispensed with,—they actually become a dram without which the usual functions of digestion cannot be performed, and many females in a higher condition of life become so habituated to their use, in consequence of their being constantly prescribed by some of the fashionable doctors of the day, that they cannot go on without them, and the unfortunate termination is a love at last of stimuli, which produce the very nervousness they were at first intended to check. There are other preparations in which cinnamon is very properly introduced, to which I shall incidentally direct your attention hereafter.

NAVAL SURGEONS.

To the Editor of THE LANCET.

SIR:—When you did me the favour to publish, in the 15th number of the last volume of THE LANCET, a communication on the comparative condition and claims of the medical officers in the Army and Navy, I did not expect that it would have led, as it has done, to a lengthened though desultory and disjointed discussion. I did not dream that it could excite angry feelings in any one, especially in any member of the naval medical body, whom I thought, if it did not benefit, it could not possibly injure or annoy; yet to one of your correspondents on the subject, the first whom it called, though tardily, into the field, it has given grave offence. He who writes under the signature of a "Navy Surgeon," addresses you in the 15th number of the present (now the last) volume of THE LANCET, is offended, because I was not more explicit, asking questions without answering them. They were not impertinent questions, and could be easily answered by all to whom they were put, and who had any interest in them. He is offended because Lord Melville, when in office, did not call to his aid "men of erudition, general science, and great professional abilities," including him, "the Navy Surgeon," and constituting him a member of the Board, a physician-general, it is presumed; and he is especially offended, because he cannot, in his disinterested simplicity, understand what advantage, as he expresses it, "we were to derive from the loss of one half of our half-pay, so kindly proposed to be taken from us," by Sir James Graham and Sir William Burnett. To this, and other topics which your correspondent has touched, I will refer more particularly by and by, and will endeavour, without asking questions, to make him and other readers understand them, as well as some other matters of which he appears to be ignorant. If his ignorance be bliss, I should be loath to disturb it, but there may be others who will be glad to know the true nature of the case.

In my first letter on the subject, I confined my remarks to the relative claims and pecuniary reward of medical men in the two branches of the public service. I then tried to show briefly, and therefore interrogatively in part, that in respect of claims the medical officers in the Navy were equal to their brother officers in the Army; that they were as well educated, had as much, often more, trying experience, and were necessarily more exposed to hardships, and I submitted that they should be as well paid. The comparison could be easily made, and justice, as far as emolument is concerned, could easily be done. I did not endeavour to bring incompatible things together; I did not attempt to compare things having no points of likeness, such as a barrack to a ship, or a regimental surgeon's quarters to a naval surgeon's cabin, though these are things of which your correspondent alleges we have reason to complain. I wonder what he thinks of a gale of wind as a grievance, or at what price he would reckon it in his account with the public; according to my estimate it should not be a low one. Nor did I complain of want, either positive or comparative, of "the most approved medicines," or of "abundance of nutriments, condiments, and stimulants," knowing, as I did, and as every man who signs himself a "Navy Surgeon," and comes forward as a corrector and instructor, should know, that in the naval service there is no want of any of these things. Of this I will presently present you with such evidence as will convince all men, even a "Navy Surgeon."

In Number 18 of the present volume of THE LANCET, there is a communication from "A Naval Surgeon of the last Century," replying to, and commenting on, certain statements, and implications in the letter of "a Navy Surgeon;" with the views of that writer I generally agree, and beg particularly to call your attention to the tables he has given of the pay and half-pay of the medical officers in the Army and Navy respectively. When you have compared those tables, I would ask you whether it be fair, whether it be decent, that such difference, involving such glaring injustice to one party, should be allowed to exist, the means of remedying the evil being so easy and so apparent. On this point all your correspondents on this subject are, I presume, agreed, as I have no doubt every other man will be, who looks at it dispassionately.

Then, in your last Number, comes "a Naval Surgeon of the present Century,"

with a catalogue of complaints, among which appears prominently the want of comforts for the sick sailor, a wailing for "nutriments and condiments," something after the manner of a "Navy Surgeon," with doubts, as to whether the Physician-General "has truly and properly represented these disgraceful defects."

Of stimulants, at least of alcoholic stimulants, there is too much in the Navy, and it generally becomes the surgeon's duty to prohibit, seldom to prescribe them; but if they ever are required medicinally, they are always at his command, in ships of war. It is childish work to rear castles of cards for the purpose of knocking them down afterwards; but it is worse than childish to conjure up a gigantic grievance, to puzzle philosophical heads, and grieve tender hearts, when, except in fancy, no grievance exists. That the cry for "nutriments, condiments, and stimulants," is an uncalled for cry in the Royal Navy, the following diet table, which has been acted on for years, will sufficiently show:—

A Scheme of Diet for the Sick on board her Majesty's Ships, daily, viz.:—

Soft bread, when procurable, full diet, 1 pound; half diet, 12 ounces; low diet, 8 ounces.

Beef, full diet, 1 pound; half diet, 8 ounces; low diet, none.

Vegetables, when procurable, full diet, 1 pound; half diet, 8 ounces; low diet, none.

Broth, full diet, 1 pint; half diet, 1 pint; low diet, half a pint.

Barley for broth, full diet, 12 drachms; half diet, 12 drachms; low diet, 6 drachms.

Or rice, in lieu of barley, full diet, 10 drachms; half diet, 10 drachms; low diet, 5 drachms.

Pot-herbs, when procurable, full diet, 24 drachms; half diet, 24 drachms; low diet, 24 drachms.

Salt, full diet, 8 drachms; half diet, 8 drachms; low diet, 8 drachms.

Vinegar, full diet, 16 drachms; half diet, 16 drachms; low diet, none.

Tea, full diet, 3 drachms; half diet, 3 drachms; low diet, 3 drachms.

Sugar, full diet, 14 drachms; half diet, 14 drachms; low diet, 14 drachms.

Milk, when procurable, full diet, one-third of a pint; half diet, one-third of a pint; low diet, 1 pint.

Wine, at the discretion of the surgeon.

Cocoa, as a substitute for tea, full diet, 1 ounce; half diet, 1 ounce; low diet, 1 ounce.

Would it not have been well that the "Navy Surgeon," and the "Naval Surgeon of the present Century," before they occupied the pages of THE LANCET, giving themselves so much trouble in making erroneous statements, and me some trouble in refuting them, had been a little more curious about facts? Instead of going back twenty years, to fish up grievances for the day, quoting No. 15 and 16 of a code of *abolished instructions*, and other things equally obsolete, would it not have been as well to have looked at the *present instructions*, where they would have found the above table, and other matters of some moment to the ordinary surgeons of the age, but which may appear insignificant to "men of erudition, general science, and great professional abilities," whom Lord Melville, in his fear or his folly, did not call to his aid as counsellors. Before they come forth as "counsellors" again, however, on this subject, let me recommend them to make themselves acquainted with *things as they are*.

It is true that the above table, and the advantages arising from its provisions, did not exist twenty years ago, about which time your two correspondents' notions of the service appear to have been formed, when they became fixed, and below which it seems impossible to drag them. It is true that at that time the Physician-General was not in office, and it appears that about that time "a Navy Surgeon" would have given his aid as a counsellor to Lord Melville, but that his aid in that capacity was declined, unfortunately for the service, no doubt; we, however, not having enjoyed the benefit of his "erudition, general science, and great professional abilities," cannot be supposed to feel the full amount of the loss we suffer. But this we know, that the scheme of diet in use for sick seamen was proposed and carried into effect by the Physician-General. In what light it may appear to "a Navy Surgeon" I cannot tell, though after the praise bestowed on the Army authorities for the abundance of nutriments, &c., he must, one would think, admit its value; but with me it was a motive, and a strong one, for asserting what I here repeat, "that the Physician-General has the welfare of the corps, over which he so ably presides, much at heart." It does not put money in his purse, it is true, nor a feather in his cap, but it will often enable the surgeon, after struggling anxiously and successfully with the violence of acute disease, to conduct, through tedious convalescence, to cure (a most gratifying duty) patients whom, but for its provisions, he would have lost.

Allow me, in passing, to correct another error in the letter of a "Navy Surgeon." He asserts that surgical instruments are furnished to army surgeons gratis. If he will take the trouble of looking at the Army instructions, he will find that the medical officers in that service have no such privilege, any more than those in the Navy. Should he not have taken that trouble before?

In the proposed measure of cutting off

"one half of our hard-earned half-pay," the Physician-General showed that he had the welfare of the corps, over which he so ably presides, much at heart." This may appear an appalling paradox, but if you will allow me a little more space in your columns, I will show you that it is true to the letter. The explanation which I am about to offer, could have been given as well by "a Navy Surgeon" as it can by me, though such common-place matter-of-fact work was not perhaps to be expected from a man of mind so comprehensive, and style so epigrammatic. Why did he put forth a statement so garbled, so short of the truth, and therefore so fitted to mislead? He does not like questions, but I hope he will think it incumbent on him to answer that one fairly. Without fuller and corrective information on the subject, what impression would that statement make on the minds of your readers? This; that the Physician-General did his utmost to persuade the first Lord of the Admiralty, to deprive *all* the surgeons in the Navy of the half of their hard-earned half-pay; in many instances, not only most hardly earned, but most inadequate, certainly. What! they exclaim, is it possible that any man, in such a place, could be so base as to steal like a toad to the ear of authority, and there, by glozing words and sophistical statements, endeavour to accomplish an object so diabolical? Let your readers spare their indignation till they know the *whole* truth.

The intention of the proposed measure, a measure which it is hoped will yet and speedily be carried into effect, was this,—to *graduate the rates of half-pay, according to the rates of service performed by each surgeon*,—a scale of reward desired by the working members, but dreaded by the drones of the profession.

The Physician-General, as a matter of policy chiefly, it is believed, and with the view of making the measure more acceptable at the Treasury, as not increasing expense, proposed to take part of the half-pay from the idle, and give it to the industrious. But without reference to the question of policy, I beg to say that I think the proposed appropriation, taking from the strong who could but would not work, and giving to those who were willing, or who, despising the subterfuges and false pretences by which others evaded service, were compelled to work, founded in strict distributive justice. As the law stands, the surgeon who has served six years, including three years as an assistant, is entitled to as much half-pay as he who has served thirty years, minus one day. In this there is evidently no pecuniary inducement to serve. The consequence has been, that two-thirds of all the naval surgeons have attempted, many of them successfully, however fairly, to avoid serving. After being employed three years, at a time when their experience might not have brought a high price in the market of medical competition, they have set themselves down in some pleasant place, and got into snug and profitable practice, enjoying the maximum of half-pay, during a period, perhaps, of twenty years; while others, less knowing in the methods of getting off, or less willing to practise them, have been serving on in climates and amid privations, which have injured their health and exhausted their strength irreparably. "Look on that picture and on this." And these two classes of men receive exactly the same half-pay, according to the present regulations. It was to remedy such gross and glaring wrong, as well as to draw, not drive, surgeons to serve, that the measure in question was proposed. It was proposed to adjust the rate of half-pay to the amount of service performed, and so far to assimilate the Navy to the Army branch of the medical service. It is true that there has been no reduction of half-pay in any class of army medical officers, but there has been a "commuted allowance," for such as declined service,—a less advantageous measure to the recipient than the proposed reduced half-pay in the Navy, inasmuch as it cuts off widow's pensions, which the other would have allowed. In all cases where there was a *bona fide* plea of ill health in bar of service, however short the term of previous service, the proposed measure of reduction was not to have been applied. Now, Sir, I ask you, and every impartial thinker, *not* "a Navy Surgeon," whether the proposed *reform* would not have been a great advantage to *us*, and whether, *through it*, the "Physician-General has not shown that he has the welfare of the corps *much* at heart?"

He has long been anxious to have assistant-surgeons admitted to mess in the ward-room, to have all the time they serve allowed for increase of pay and half-pay, and to place them on the same footing as their brother officers in the Army, so far as the different nature of the two services will admit.

He has succeeded in getting an increase to the pay of assistant-surgeons serving in vessels in which there are not surgeons. He has had the medicine chests, their contents, and fittings, put on a greatly-improved footing; and, at his instance, efficient, well paid, sick boy-servants have been granted, as part of the establishment, a great boon to the sick, and a great comfort to the surgeon.

Such are some of the things done, and attempted to be done, by the Physician-General. What was done by his predecessors?

To declare these things is to be an eulogist; so is every man who declares the deeds of any benefactor of his country an eulogist, but an honest eulogist. An honest eulogist is not one "who deals in praise

undeserved." What sort of a subject "a Montrose eulogist" may be, never having visited the place, and having little personal knowledge of its exported commodities, I cannot pretend to say; but I can fancy that there, as elsewhere, there may be honest as well as interested and dishonest eulogists; I can also imagine a Montrose, or even a Metropolitan maligna,—a creature eloquent in idiomatic Scotch, having a great conceit of itself, and a disparaging opinion of others, but so patriotic withal, that it might be persuaded, from the mere desire of doing good, to accept the office of Physician-General of the Navy. I am, Sir, your obedient servant,

A NAVAL SURGEON.

March, 1838.

PUERPERAL FEVER.

To the Editor of THE LANCET.

SIR:—If the following case of puerperal fever, now unfortunately so prevalent in London, should present any points of interest to your numerous readers, I shall feel obliged by its insertion. I have the honour to be your obedient servant,

HENRY SYMES.

St. Thomas's Hospital, April 23, 1838.

Mrs. Beverley, residing in Broadwall, Stamford-street, aged 26, of very delicate constitution, was attacked on the fifth day after delivery of her third child, with severe shivering, sickness, and violent headach; the next day the vomiting was urgent, feet cold, pain in right iliac region, milk and lochiæ diminished. On the third day of the attack, Wednesday (March 7th, 1838), I saw her for the first time at 3 P.M.; intense pain, confined to right iliac region; pulse 130, exceedingly feeble; tongue furred; skin cold, and having the peculiar dusky yellowness; countenance anxious; breathing accelerated; bowels had not been relieved for three days:—

Calomel, x. grs.;
Com. powder of ipecac., x. grs.;
Comp. antimon. powder, v. grs.; a powder to be taken at once; and to have the following powder every four hours:—

Comp. antimonial powder, ij. grs.;
Calomel, ij. grs.;
Compound powder of ipecac, v. grs. M.

A large linseed meal poultice to abdomen, and injections of decoction of camomile to vagina.

Nine P.M. Pain increased; pulse 140, weak; skin cold and clammy; bowels once moved, very dark and offensive; great thirst; can only lie on her back.

Thursday, 11 A.M. Has had no sleep; pain now over whole abdomen, which is tympanitic; pulse 130, weak; skin warm and moist; tongue coated with brown fur; milk and lochiæ quite suppressed, bowels not open since yesterday.

Castor oil, ss. oz. immediately. To continue powders.

Three P.M. Poultice causing pain, hot flannels substituted.

Nine P.M. Much the same; insomnia; thirst.

Midnight. Increased pain in abdomen; legs drawn up; vomited a great quantity of thin, clear, brownish fluid.

At 1 A.M. of Friday became insensible for two hours, afterwards she fell asleep for two or three hours, and on awaking complained of her mouth being *very* sore. She had taken ten powders, besides the first, altogether 30 grains of calomel, 33 of antimony, and 60 of Dover's powder, in 32 hours. To leave off the powders.

Friday, 9 A.M. Bowels copiously relieved; better in every respect; hardly any pain; pulse 96; skin warm and moist; tongue still coated; tympanitis subsided.

4 P.M. Tenderness only on pressure; pulse 90, and stronger; milk and lochiæ returning.

Camphor mixture, 1 oz.;
Solut. of acetat. of ammon., ss. oz.;
Tinct. of hyoscyam., xx. drops, thrice a day. *Castor oil*, ½ oz. at night. To have arrow-root, tea, toast, and water, and barley water, having been her previous diet.

Saturday. Bowels have been well opened; tongue clean; pulse 90; milk in great quantity. Fish, broth; to leave off medicine.

Sunday. Sat up for an hour; alum and water wash for the mouth.

Monday. Beef tea, and half pint of porter daily.

Thursday, March 15. There still being great debility, she had an ounce of the following mixture three times a day:—

Sulphate of quinine, half a scruple;
Infus. of roses, v½. oz.;
Syrup of oranges, two drachms;
Tinct. of hyoscyamus, two drachms.
Make a mixture.

This, continued for a few days, completely restored her. The pulse at no time would bear leeches, much less venesection, so efficacious in this disease when the debility is not so great.

THE LANCET.

London, Saturday, May 5th, 1838.

To resume the argument on the Health of the Navy, we proceed to show that, by a few modifications of a ship's economy, the mortality may be raised so high as to threaten the extinction of all on board, or be reduced to an inconsiderable fraction: that the men may be rendered effective, strong, invincible; or languid, suffering, and sickly. This is an experimental inquiry, and the experiments have been made for us: the ignorance of early mariners, the avarice of traders, and the corruption of the Admiralty, have illustrated almost all modes and degrees of sickness and death at sea. The examples we shall adduce are few; but the results are corroborated by the experience of all voyages that have been accurately reported.*

Columbus sailed from Palos on August 3rd, 1492, and on October 12th first saw the new world. 120 men in 3 ships were at sea six weeks. He left 30 men at Hispaniola on Jan. 2nd, 1493, and returned to Palos March 15th. Columbus was fortunate in falling upon the healthiest islands in the West Indies in winter. The mortality in his short voyage was probably low, for it is not stated in the narrative. Of 10 Indians, however, that accompanied Columbus home, *six* died on the passage.

Five ships sailed from Spain under Magellan on August 10th, 1519: Magellan, and nearly all the rest, perished; one ship and 13 men returned at the end of 3 years and a month. They were the first circumnavigators of the globe. Drake and his crews brought back one ship; 4 were lost. Two ships returned from the second ill-fated voyage of Candish: of 76 men, 16 remained alive at the end of 1 year and 3½ months: 5 only were able to move when they entered port, June 11th, 1593. They had been short of food, and had general dropsy It began in the feet, and in two days extended as high as the breast, so that they could not breathe. In this state several died raving mad. De Wert sailed from Goree with a fleet of 5 sail on a voyage to the South Seas: he returned at the end of 2 years. The seamen were at one time reduced to 4 ounces of biscuit a day. The scurvy was so bad that they had not men enough to steer the ship. 69 men died on board the Admiral's ship, leaving "36 to give God thanks." The first voyage of the *English East India Company* marks an important epoch. The fleet consisted of 5 small ships, of 1500 tons burthen, carrying 528 men. It was commanded by General Lancaster, for this was the Admiral's title; and the designation of Admiral was in those days applied to the General's ship, which here carried 205 persons. The fleet sailed from Woolwich on the 13th of Feb. 1601, but was detained at Torbay till April 22; and did not pass the Tropic of Capricorn before July 24th. Many of the men fell sick; and by the 1st of August so many had the scurvy that in all the ships except the Admiral they were hardly able to manage the sails. They arrived at the Cape of Good Hope Sept. 9th: the general went on board the other ships to bring them in, "and hoisted out their boats for them, "which they were not able to do of themselves." The writer of the voyage in Purchas's Pilgrims, after ascribing the scurvy to salt meat, and being long at sea, goes on to say: "The reason of the men in "the Admiral being in such better health "than in the other 3 ships was this: the "general brought with him to sea several "bottles of *lemon juice*, of which he gave to "each man fasting, not suffering them to "eat anything afterwards till noon. By "this means he *cured many of his men and* "*preserved the rest*: so that, though his "ship had *double the number of men, he had* "*not so many sick, nor did he lose so many* "*men as the rest*." They had, however, lost 100 lives; and 5 died after landing at the

* See the collections of Purchas, Hackluyt, Harris, Kerr.

Cape. Here the tide of sickness turned: they purchased 1000 sheep, and 42 oxen, large and fat; and had such "royal refreshing" that all the men recovered their health and strength. The fleet put to sea October 24th; plied eastwards, and anchored between St. Mary's and Madagascar, Dec. 15. Many of the men began again to fall sick; they here procured "some store of *oranges* "*and lemons, being very precious to purge the* "*sick men of scurvy.*" On going ashore at Antongil they discovered that 5 Dutch ships had been there; and left 150—200 dead bodies behind them. The Admiral lost the Surgeon, the Chaplain, and 10 men, chiefly from flux. The General plundered and traded round Java and Sumatra till February 1603; and then sailed for St. Helena. The fleet reached that island in June, when "all the "sick men recovered their health through "the abundance of goats and hogs provided "for their refreshment." The General arrived in the Downs Sept. 11th, 1603.

The East India fleet was as well fitted out as any of that age, yet 105 of 528 men died aboard in seven months, on the passage to the Cape. LANCASTER was acquainted with the virtues of lemon juice; and this experiment is conclusive in its favour, yet it was not generally introduced into the British Navy until two centuries had elapsed.

The Dutch first succeeded in reducing the mortality at sea. The *Nassau* fleet of 11 sail, and of 5260 tons burthen, sent against the Spanish settlements in America, circumnavigated the globe. It had 1637 men aboard on sailing from Goree, and 1228 remained alive at the end of 1¾ years, when it reached the Ladrone Islands, in February, 1625; 32 had deserted; 36 had died violent deaths. They touched at the Cape de Verde Islands, Sierra Leone, St. Thomas's, Shapenham's Bay, Juan Fernandez, and other places. The people ate intemperately at Sierra Leone, "by which," says the historian of the voyage, "and the bad air, the "bloody flux increased among them so that "they lost 40 men in 25 days." At Amubon they procured 20,000 oranges besides those which were eaten on shore. They sailed from Juan Fernandez April 13th, and attacked Calloa: water was very scarce; by the 15th of June scurvy prevailed so extensively, that some of the ships could not man their boats. A herb was found in the island of Lima, by which the best men in the fleet in a short time recovered health and spirits. In the sail of 3 months across the Pacific scurvy again made great progress, and scarcely men enough remained to work the ships. Their strength was reduced to 1228 at the Ladrone Islands, and the ships were distributed amongst the Dutch possessions.

In all the more fatal voyages the food was scanty, and of the worst description; the water often ran short; filth was allowed to accumulate; and the use of antiscorbutics was unknown, or neglected by mercenary traders and reckless governments. SCHOUTEN and LE MAIRE, two private Dutch merchants, showed with what a limited loss of life long voyages may be performed. SCHOUTEN sailed on the 14th of June, 1615, from the Texel, with two vessels, carrying 87 men, round Cape Horn, and reached Batavia Oct. 31st, 1816; where the vessel (one was burned) was sequestered by the Dutch East India Company. The crew returned in the *Amsterdam* to Zealand, July 1, 1617. SCHOUTEN made several important geographical discoveries, and lost only 3 men. This economy of life was achieved by great attention to all the details of the ship's management, by an extra allowance of food, and by antiscorbutics. Each man had a can of beer daily, 4lbs. of biscuit, ½lb. of butter, ½lb. of suet, weekly, and 5 large Dutch cheeses, to serve during the whole voyage, *besides* the ordinary allowance of salt meat and stockfish. At Sierra Leone every man was supplied with 150 lemons for sea store, and pottage of herbs and fresh water at different islands. The art of preserving life at sea, then, was discovered so early as 1617. It is deplorable to find after this, examples of the failure of British expeditions, the loss of ships, and the sickness and deaths of thousands of British Ma-

riners, from diseases that might have been prevented or mitigated to an inconceivable extent.

It is lamentable to read the fate of Anson's fleet after the comparatively triumphant transport of the Nassau squadron over the same seas. Anson sailed from St. Helena with 5 ships of war, a sloop, 2 victuallers, and 1710 men, on September 18th. Two ships of war returned; the *Wager* was shipwrecked. The *Centurion* had 506 men, the *Gloucester* 374, the *Tryal* sloop 81. The *Centurion* lost 2 men on the passage to Madeira (38 days); after a stoppage of 9 days at Madeira the fleet sailed (46 days) to St. Catherine's. In 3 weeks the ships became remarkably sickly; many died from fevers and dysentery. The *Centurion* sent 80 sick ashore—16 per cent.; and the other ships as many in proportion. The fleet sailed from St. Catherine's Jan. 18, 1741, and traversed the Straits of Lemaire. Scurvy made its appearance in March; in April, 43 died on board the *Centurion*; in May, double that number. Fevers, dysentery, malignant ulcers, were confounded by the early navigators under the name of scurvy; and the narrator of this voyage says, that scurvy produced putrid fevers, pleurisies, and jaundice. The men had discoloured spots dispersed over the body; the gums were putrid; the legs swollen. The bones decayed; fungous ulcers infested the legs. The seamen's spirits were shrouded in gloom; the lassitude was extreme; and they swooned and died on the least exertion. The *Centurion* and *Tryal* arrived at Juan Fernandez June 16th, 145 days after leaving St. Catherine's, and landed 167 sick. The *Gloucester* suffered still more, and arrived 37 days later. The loss of men in the 3 vessels down to Sept. 1st, was as follows:—

	Number at St. Helen's.	Died in 10 Months.	Remaining alive September 1.
Centurion....	506	292	214
Tryal	81	42	39
Gloucester ..	374	292	82
Total.....	961	626	335

At Juan Fernandez the crews recovered; but in traversing the Pacific the sickness broke out again, and 8 or 10 men died daily. About half the 335 died in the ensuing 12 months; and out of 199 alive, including negroes and Indians, 128 were landed sick at Tinian, Aug. 26th, 1742. The *Centurion* took the Spanish galleon, and returned to England, after an absence of 3 years and 9 months.

Captain Cook's second voyage demonstrated the possibility of reducing the mortality at sea to an extent that had never been conceived in this country. The *Resolution* left Deptford April 9th, 1772, with 112 men; was absent 3 years, exposed to the extremes of heat and cold, in the frigid and torrid zones of the southern hemisphere; and returned at the end of 3 years, with the loss of only 4 men, 3 by accident, 1 by disease. In a paper read before the Royal Society, Cook described minutely the means which he employed to secure the health of his crew; the care taken in selecting a vessel, in drying and ventilating, in providing good provisions, and an abundant supply of fresh water. They had malt to make sweet wort of, portable broth, rob of lemons and oranges, sugar instead of oil, with which the Navy was then supplied, and *sour Krout*, made from chopped cabbage, fermented. The third voyage, though fatal to Cook, was equally successful; the two ships, manned by 192 men, lost in 4½ years, only 5 persons by disease, and 6 by violence among the savages. The Royal Society gave Cook the Copley Medal, and the art of preserving the Health of the Navy was everywhere made known in the popular narrative of his voyages. No discovery ever gave this "perfect master of his profession" so much pleasure. At the close of his second voyage, after referring to the fable of the Southern Continent which he was sent to explore, he adds:—

"But whatever may be the public judgment about other matters, it is with real satisfaction, and without claiming any merit but that of attention to my duty, that I can conclude this account with an observation, which facts enable me to make; that

our having discovered the possibility of preserving health amongst a numerous ship's company, for such a length of time, in such varieties of climate, and amidst such continued hardships and fatigues, will make this voyage remarkable in the opinion of every benevolent person, when the disputes about a Southern Continent shall have ceased to engage the attention, and to divide the judgment of philosophers."

Little use was made of COOK's discovery in the American war; for to keep up a force of 60,000 to 70,000 seamen, 170,910 were raised in the 5 years 1776-80: 1243 were returned as killed in the same period, and 18,545 died from diseases which ought never to have existed. The Channel fleet, under Admiral KEPPEL, in 1778 sent 3600 sick to Haslar in 36 days: and in 1779 the Channel Fleet, under Sir CHARLES HARDY, sent 2500 patients to the hospitals in September, while one thousand ill from fevers, remained on board for want of room. Patients were lodged in the lobbies at Haslar: a prison was appropriated to their use; and two convalescent ships were added to the establishment. After a 10 week's cruise in the Bay of Biscay, Admiral GEARY's fleet returned to Portsmouth with 2400 men ill with scurvy. Besides those sent to hospital, many were landed and lodged in tents, or allowed to wander about the fields.

We have already enumerated some of the causes to which the high mortality of the British Navy was ascribable. Measures were projected in the beginning of the 18th century to carry away effluvia, and to supply the decks with fresh air. The writer of Anson's voyage regrets that "the late invented methods for keeping ships sweet by a constant supply of fresh air," were often neglected; and intimates that some who had been appointed to experiment their effects, acted with culpable partiality in the accounts that they gave of the trials. Air was excluded, and the odour of the ships became intolerable. The lower deck ports in Anson's fleet could not be opened, and at St. Catharine's "the stench and vermin had increased to a loathsome degree." The ship was scraped, but by the time it reached Juan Fernandez "became intolerably loathsome between decks." British Men-of-War continued unimproved, in this this respect, down to the end of the 18th century.

A still greater grievance existed. The victualling of the fleet was ill-conducted. The Bread and Meat supplied by contract were of the worst description. So early as 1708 complaints were lodged against the victuallers, and at the instance of the three Hoars, the Lord High Admiral appointed Sir CLOUDESLEY SHOVEL to visit the stores. But a delay of 3 months elapsed, to enable (it is said) the storekeepers to remove the deleterious materials. WILLIAM THOMPSON published a pamphlet on the victualling of the Navy, an abstract of which was inserted in the "Gentleman's Magazine" for March, 1757. He proved that the provision casks were bad and filthy: that they were often allowed to stand in the yards, filled with meat, for months before they were coopered; that the brine wells were of timber, and emitted a putrid odour; that 800 hogs, supplied by distillers, were cured although they stunk as soon as they were dead; that sows ready to farrow, pigs affected with cough and cutaneous diseases, were indiscriminately consigned to the pickling tub. Lean Lincolnshire steers, grazed and worked, were killed, instead of fat oxen. At Portsmouth, *measley* hogs, and hogs found dead in the stics, were salted: bulls were substituted for oxen. The flour and all the other articles were adulterated to an equal extent. The Commissioners in the victualling department amassed fortunes rapidly—amounting in some instances to £300,000. THOMPSON's statements were never met; but the Commissioners had interest enough to commit him to prison; and the abuses of the Navy continued down to 1802, when Lord VINCENT, who was then first Lord of the Admiralty, appointed a Commission to inquire into the Affairs of the Navy. Eleven reports were published in the parliamentary papers. And in 1805

the House of Commons impeached Lord MELVILLE. Lord MELVILLE and all the officers, from the Navy Board down to the coopers in the yards, had been plundering the public, and appropriating the money, voted for the Navy, to private purposes. The ships fell into decay, improvements in their construction were neglected, and the provisions for preserving the men's health were withheld. A great capitalist, a banker, or a merchant in the city, generally contracted for all the articles required, at a given rate; he bribed the Minister, and remunerated himself by selling the contracts to other parties. The contracts thus descended through three or four hands: and while the highest price was paid by the nation, the worst articles in the market were supplied. The beef contained no nutriment: the biscuit putrefied, and filled with maggots before a ship had been a month at sea. The Contractors and Commissioners grew rich: but their corruption entailed incalculable loss on the country. The destructive diseases of which it was the main source inspire the mind with horror. If Lord MELVILLE, Mr. JELLICOE, Mr. TROTTER, and the Harpies of the Admiralty could have been carried round the wards of Haslar Hospital, up the lobbies, round the prisons, along the decks of ships, and beheld the thousands of brave men lying spotted with impoverished blood, thirsty, fevered, and mad, or dying—if they could have beheld the wasted spectres wandering gloomily round the tents erected for their reception in the fields—if they could have been placed on the shore, and all the ghastly dead scattered over the depths of the channel had been called up from the waves, the vision of the unspeakable suffering that they had created might have appalled even these remorseless men.

We have shown that the mortality at sea can be raised to any extent; and that the heads of the Navy have the mens' lives so absolutely in their hands that they can put a given number to death at will, without employing any other means than bad food, insufficient air, and the poisonous effluvia of animal secretions. We have yet to determine how far the mortality of the Navy can be reduced.

THE following letter was printed in the "London Medical Gazette" of Saturday last:—

"MR. WAKLEY AND THE IRISH MEDICAL CHARITIES BILL.

"*To the Editor of the Medical Gazette.*

"SIR:—How Mr. Wakley can reconcile his opposition to the Medical Charities Bill for Ireland, without specifying the grounds of his hostility, must be rather perplexing to many of his medical brethren, not only in the sister kingdom, but in Great Britain also. More or less Mr. Wakley has been advocating a *principle of superintendence* and control ever since his journal has been established; it has been his "meat, indeed, and his drink indeed." But when a motion is brought before the Legislature for the furtherance of the above-named objects, he not only does all he can to retard its progress, but to bring it into contempt.

"No doubt but the present bill has some defects, which might be, and will probably be remedied in its further progress through the House; but to offer opposition for the mere sake of opposition, is what few of the well-wishers to the profession will admire.

"Mr. Wakley is a talented man, and has done much good to the profession; and may, and will, I hope, do more; but his writings and his speeches are often intemperate and ill-advised; and were he to be less talkative in his place in the House, would do more good, and gain the confidence of his medical brethren in a higher degree, than by fifty phillipics against a bill which has, after all, much in it that is likely to prove a real service to the profession in Ireland.

"I am aware, Mr. Editor, that our views in many matters are widely different, but I trust to your candour for a place in your journal for the present letter, because, in the first place, THE LANCET would probably not be open to strictures such as I now put forth; and, secondly, because I do not wish to run the risk of a refusal.

"Mr. Wakley, from the prominent situation he holds, carries with him great weight and influence, and is much looked up to by a great portion of the profession; but it must be allowed that in some instances he is in error, in attempting to deprecate what cannot but prove beneficial, if rightly administered; I mean, of course, the bill which I am now more especially discussing, and without hesitation say, that if

anything ought to be done, it is to be done in a manner similar to what Mr. French has proposed.

"Can Mr. Wakley deny that some method of control or inspection, or call it what we may, is not called for? Has he not been continually, in the pages of his journal, writing in favour of it? And can any man say that a measure framed in a right spirit is not likely to promote the welfare of the public and faculty too? How can we so readily put an end to the system of quackery now so rife among us with druggists and advertising mountebanks, as by men, immediately under the sanction of Government, taking official cognizance of such proceedings, and reporting in the proper quarter the injury thus sustained both by the profession and public? And how can an end be put to the vile system of traffic which now prevails among us, with respect to hospital and other appointments, if we have not some such plan as the 'Medical Charities Bill' for Ireland contemplates? I deny, in the name of my medical brethren, the truth of Mr. Wakley's statements. I am satisfied that the present bill is likely, with certain modifications, to be highly useful and beneficial; and I only hope that a similar measure will be introduced for England,—where as much requires to be done, or nearly so, as anywhere else. Look at the jobbing and purchasing of place; look at the infringement which the private practitioner is continually exposed to; see the swarm of irregulars which set down next door or so to him, and take the bread out of his mouth with impunity, and without any prospect of redress on the part of those who have worked for years and spent hundreds of pounds to get a respectable livelihood.

"It may be all very well for Mr. Wakley to object to this and the other thing; but why, if he is so earnest in advancing the interests of the profession, does he not bring forward a bill himself for remedying such abuses? Not a bill, however, framed in such a spirit as has no chance of passing the Legislature, but a temperate and judicious one, such as would confer a substantial boon upon those who need it.

"Whether Mr. Wakley is sincere in all this opposition I cannot pretend to say; but if he is, I know not how to reconcile it with his vaunted liberality; for that something is needed all parties allow; and I know, that if a proper system of medical superintendence be established, and that superintendence be rightly and wisely acted out, it will prove not only a bar to the iniquities in high places, and the numerous other drawbacks which the private practitioner is exposed to, but will prove an invaluable blessing to the profession generally.

"Lastly, why does not Mr. Wakley, if he can spare the time, consult with Mr. French, and get the obnoxious clauses of the present bill expunged; and further something, at least, in the shape of relief to his brethren. Hoping the above will be received as intended, I remain, Sir, your most obedient servant,

"PHILO."

If any persons are readers of the "Medical Gazette" who do not read THE LANCET, what opinion can they form of the conduct of Mr. WAKLEY from the statements of "PHILO" relative to the Irish Medical Charities Bill? The readers of THE LANCET well know how fully and amply the provisions of this measure have been discussed in the pages of this Journal. They know that every argument in relation to it has been worn threadbare; and yet the person who writes under the signature of "PHILO" exclaims,—

"How Mr. Wakley can reconcile his opposition to the Medical Charities Bill for Ireland, without specifying the grounds of his hostility, must be rather perplexing to many of his medical brethren, not only in the sister kingdom, but in Great Britain also."

But the writer may reply, "I did not refer "to THE LANCET, but to the conduct of Mr. "WAKLEY in the House. He has not speci- "fied the grounds of his opposition *there*." Then would we call on the reader to examine the third paragraph of "PHILO's" letter:—

"Were he to be less talkative in his place in the House, would do more good, and gain the confidence of his medical brethren in a higher degree, than by fifty phillipics against a bill which has, after all, much in it that is likely to prove a real service to the profession in Ireland."

So that Mr. WAKLEY was required to be "less talkative" in the House, by reiterating every third night, in the House of Commons, when the Medical Charities Bill was brought forward, his arguments against the provisions of that very obnoxious measure! We question not the motives or the intentions of "PHILO," but we are bound to believe either that he has not read the Medical Charities Bill, or that he has not read the articles which have appeared in THE LANCET against that measure, or that he expects *an appointment under the Act*, so soon

as the Bill becomes a law. "PHILO" hopes "that a similar measure may be introduced "for England." Let it come. Could it pass into a law? That is *another* question, and it is one which will be answered in the *negative* by nearly twenty thousand medical practitioners of this empire.

"PHILO" asks "why Mr. WAKLEY does "not himself bring forward a Bill for reme- "dying the abuses of the profession?" The answer is brief. He thought it better to wait for the printing of the evidence which was taken before the Parliamentary Medical Committee, and for the completion of the labours of Mr. WARBURTON, feeling that by rushing precipitately forward in such a cause he might injure those interests which it has been the anxious object of the last fifteen years of his life to advance and protect.

COURT OF QUEEN'S BENCH.

Sittings in Banco, Friday, April 27th, 1838.

MERRICK v. WAKLEY.

THE LORD CHIEF JUSTICE said, that this was an action for libel against the defendant. A justification had been pleaded, a special jury had awarded to the plaintiff ONE FARTHING damages, and Mr. Baron ALDERSON, the Judge who presided at the trial, had considered it to be his duty to *certify*, in order to deprive the plaintiff of his costs. In the present sitting, Mr. Serjeant LUDLOW, the counsel for the plaintiff, had moved to set aside the verdict for his client, on the ground that evidence had been rejected at the time, which ought to have been received, and also on the ground of the insufficiency of the damages. On the latter ground, certainly, the Court would not interfere. The question of damages was for the special consideration of the Jury. The rejected evidence consisted of entries which the plaintiff alleged he had made in his own visiting-book. The Court were now of opinion that the Judge had decided correctly in rejecting testimony of this description. If parties were allowed to form evidence for themselves, by entries in their own books, he (Lord Denman) knew not how the cause of justice could be sustained in a Court of Law. The Court, therefore, were unanimously of opinion, that the rule calling on the defendant to show cause why a new trial should not be granted, should be refused.

*** In addition to the "ONE FARTHING," which MERRICK obtained as *damages* for the injury which the Jury supposed his professional character to have received by the publication of an account of his skilful mode of treating poor PROTHERO, who was afflicted with a strangulated inguinal hernia, which the said MERRICK allowed to burst, leaving in its place an artificial anus, without relieving the patient by means of a few incisions with a sharp instrument,—in addition to this FARTHING, he has had the certificate of the Judge to deprive him of his costs; and now, having incurred additional expense in an appeal to the Court for a new trial, he has received a peremptory and final refusal.

In setting down the figures relating to MERRICK'S costs in the last LANCET, the amount was incorrectly printed at *one* hundred and fifty, instead of *two* hundred and fifty pounds. But we may now state, on the authority of our solicitors, Messrs. LOFTY and POTTER, that the costs on behalf of the plaintiff alone, had not Mr. Baron ALDERSON most properly and honourably certified to deprive MERRICK of them, would have amounted to upwards of *three* hundred and fifty pounds. Here is evidence of the state of the law of libel!

Damages, *One Farthing.*
Costs of plaintiff and defendant, upwards of *Five Hundred Pounds.*

In addition to the above advantages which MERRICK has acquired, we have been informed that the Poor-Law Commissioners, to their credit, have intimated to the Guardians of the Kington Union, that MERRICK is no longer to be permitted to hold the office of medical officer in that Union. If SILL, MERRICK'S lawyer, should have any new client apply to him for professional aid, we thus publicly announce to him that he may apply to us for a character.

HOUSE OF COMMONS.

Monday, April 30th, 1838.

IRISH MEDICAL CHARITIES BILL.

Mr. FITZSTEPHEN FRENCH moved the order of the day for the second reading of this Bill. It was found, he said, that it would be desirable to make some alterations

in the measure, more especially with reference to the qualification and education clauses. He was therefore induced to ask those gentlemen who had opposed the Bill, to consent to have the Bill read a second time, in order that he might then go into a Committee, *pro forma*, on as early a day as possible, when, the Bill being reprinted with the proposed alterations, the House would have the fullest opportunity, at a future stage, of examining the measure in its altered, and as he trusted it would appear to be, its amended shape.

Mr. W. S. O'BRIEN felt it to be his duty to object to the course which the hon. gentleman proposed to pursue. There was scarcely any part of the Bill which he considered was entitled to the sanction of the House, and he thought that a measure of such a nature ought not to be permitted to advance a single step without opposition. He should therefore resist the motion for the second reading.

Mr. WAKLEY said that he had devoted much attention to this question, and he was inclined to differ from the last speaker, and agree to the proposition of the hon. Member for Roscommon. As it was found by the hon. mover of the Bill, and its other promoters, that the measure required alterations, it was better to see the proposed changes, than go into Committee upon clauses which had not yet been submitted to the House. Reserving, therefore, to himself an undoubted right to discuss the principle of the Bill, and to oppose any of its clauses in any future stage, he should not object to the second reading, with a distinct understanding that the Bill was to be reprinted, and that the recommitment should take place at a distant day, after ample opportunity had been afforded for examining the document in its altered condition.

Sir ROBERT FERGUSON was strongly opposed to the measure, and said he should take the sense of the House on it now—on the second reading. There were powers in the Bill which might be most perniciously exercised. Amongst them was that of the assessments which were to be made for repaying whatever money was to be advanced out of the Consolidated Fund, and expended by the direction of the Lord Lieutenant, in the erection of hospitals and other charitable medical institutions. He questioned if any alterations could reconcile him to the details of the Bill. He should therefore resist the motion for the second reading.

Mr. O'CONNELL concurred in the view of the question which had been taken by the hon. Member for Finsbury. It would be far better to allow the second reading to take place on the present occasion, and then examine the Bill in its amended form. The recommitment might, as had been suggested, be taken at a distant day, after due deliberation, and then the House would go into the consideration of clauses which had been seen and understood. Hon. Members would then know what they were about, and would not be granting powers and privileges without investigation.

Mr. WARBURTON approved of the proposal for taking the second reading at the present time, on condition that the recommitment should be taken some time hence; but he begged it to be understood that in agreeing to the second reading he was not binding himself to support a single clause of the Bill. One defect he thought was peculiarly important, namely, that of making all the Commissioners to consist of physicians and surgeons. He thought that the powers to be exercised under such a law should not be committed to the control exclusively of medical men, but that some of the Commissioners should be intelligent and influential laymen. It would be in the highest degree inexpedient to admit medical practitioners alone to exercise control as a ruling body over the medical charities of Ireland. Although, therefore, he consented to the second reading, he was not prepared to agree to the clauses.

Sir ROBERT PEEL would not resist the second reading, but he thought it of the greatest importance that, on the recommitment of the Bill, there should be a full discussion of the question on which it was proposed to legislate.

Lord MORPETH declared, that he was strongly in favour of taking the second reading then; but it was his duty to state, that he did not consider that, in agreeing to the second reading, he supported a single clause which the Bill contained. He, as well as other Hon. Members, would feel as unfettered by allowing the Bill to progress a single step, as though no such proceeding had taken place.

Mr. FRENCH said, that, with the permission of the House he would go into Committee on the Bill, *pro forma*, on the following evening. He would then get the Bill reprinted at once, and move that it be recommitted on Wednesday, the 16th of May.

The Bill was then read a second time.

Tuesday, May 1st, 1838.

On the motion of Mr. FRENCH, the House went into Committee on the Irish Medical Charities Bill, *pro forma*. The new clauses having been introduced, without discussion, the Bill was reported, and ordered to be printed, and the further consideration of the report was directed to be taken on the 16th of May.

FRACTURE OF THE TIBIA AND FIBULA.

By W. C. RADLEY, *M..R.C.S.*

RICHARD SKINNER, of Newton Abbott, aged 20 years, while passing by the New Union Poorhouse, at this place, the boundary wall fell down, and some of the large masses of stone struck him to the ground. Besides cuts and contusions, an obliquely transverse fracture of the tibia, perpendicularly through its substance, just below the central point of the leg, was the principal object of attention. The poor fellow was in a miserable plight. This was on Tuesday, March 20th ultimo.

A soft feather pillow was laid on the bed of feathers on which he usually reposed, and a bandage of many tails made, not to reach from the toes to the knee, which is certainly preposterous, but from the maleolus upwards only. The leg was bent at the fractured part very much, and the bones of course displaced; their reduction on the pillow was effected without force, and the wound dressed. There was no protrusion of bone; but where the ponderous mass of stone fell there was a large livid mark, and much effusion of blood beneath the integuments, which I forbore to open and discharge. Placed a thick pad of folded linen, wetted in a tepid lotion of a weak solution of superacetate of lead, upon the tumid part; the limb was cold; applied the bandage uniformly close in every part, but not tight; the sides of the pillow were brought by three loops to the sides of the leg, which was laid nearly straight and resting upon the heel upright, with the heel well raised to preserve the point d'appui at the seat of fracture; the knee was supported a little bent, a roll of flannel being placed under the ham for that purpose.

Sent him a six ounce mixture, containing a grain of acetate of morphia and syrup, of which he took a sixth part every two hours. Bandage to be kept wet.

21. He was in great agony for several hours the remainder of the day, but slept well last night.

22. Restless at night. His sister, a young nurse, was over diligent in wetting the bandage; the night was cold, and the temperature of the limb became too low, and the leg "ached much" for an hour. Gave him some aloetic purgative pills with conium, which acted well.

23. Easy to day; he tells me, "the leg is so easy that he feels no difference between one limb and the other." He at first laid on his back with the foot upright, but his numerous bruises made a change of position desirable; he has, therefore, lain on either side as well. The pillow, the bottom of which is nearly a semicircle, freely rotates with the limb incased upon the bed, with every change of posture. This is a great relief to him, and is of marked superiority over any other contrivance or apparatus. Moreover, the patient has been instructed to order his nurse to turn the ends of the bandage whenever the leg is uneasy, or too tight, or too slack in any part, or to bathe, or turn him round; in short, to keep him easy by removing the external cause of pain from him, by warm bathing the surface, &c. &c.

25 and 26. Had a rigor in the last cold night, with shooting pains at the point of fracture. The tumefaction that was abating is now increased, and the livid part is elevated and the whole threatens suppuration. His pulse is full, hard, strong and phlegmonic. Anxious about him lest a suppuration should come on and produce a wound communicating with the fractured lesion, which would produce much mischief and retard the restoration.

Ordered nothing but tea and slops; warm fomentations of solution of alum in water whenever very painful, and a washing over the surface with proof spirit, wetting a folded pad of soft rag in it, to lay on the tumefied and discoloured part where effusion was, and where suppuration now threatens. Mixture, with one grain of *tartar emetic* and *extr. of hyosciamus*; dose every two hours. The leg was bathed with very warm lavements, perhaps thirty times in these two days and nights, until the untoward symptoms were ousted, and the patient again restored to a state of ease and tranquillity. Continue the use of the bath and spirit.

28. Going on well; limb straight; rests a little now upon the outer side. Has this embrocation:—

Rectif. naptha, ℥ss.;
Camphor, ℥ij., solve;
Tinct. of opium, ℥ij.;
Olive oil, ℥ij.;
Subcarb. of potash, gr. x.;
Distilled water, ℥vj. The embrocation is to be well and gently rubbed with the hand all over the leg three or four times a day.

31. Going on well without any change of treatment.

April 2. Skinner says he has not felt any pain besides a slight pricking over the fracture, during the last three days. He can turn his leg round in the pillow when the bandage is off, by its own muscles, without assistance.

4. The swelling is reduced; the bone has firmly united on its outer side, where the ends of the bone pressed closely together; but on the internal and upper surface of the tibia, where the stone struck it, there is a deep furrow, feeling about a quarter of an inch broad, not yet filled up with ossific matter.

6. The furrow is evidently filling up; the flat surface of the tibia is perfectly straight,

with a small knob of exuded ossific matter at the outer extreme point of fracture. Lubricates the leg with the embrocation still.

Remarks.—Mr. Puddicombe, a surgeon of much experience at Moreton Hampstead, saw the limb yesterday, the 15th day, and expressed his satisfaction at the progress of the system of "non-interference by force" in the treatment of fractures. Many other gentlemen interested in the accident have seen him, and all have been particularly struck with his comfortable appearance and his laughing round face under the misfortune. Nine years ago he fractured the thigh of the same limb now fractured; that was by a fall from a donkey, without contusion; he was then splintered up, and the splints not untied for a fortnight. His feelings of ease now, and his recollections of the pain he suffered then, are very significantly expressed by a few plain words that might be vastly edifying to many if they could hear them,—to those who still stretch a limb upon a galling apparatus, or who still invest a sore fracture in hard splints. When four days more have elapsed it will be three short weeks from the fracture, and then, with a circular plaster of litharge plaster on lamb's skin, he may, supported by a roller, be taken out of bed, resting his leg on a pillow. By the old pinching method restoration would have been retarded to as many months, or how long the Lord only knows.

DR. WRIGHT ON FRACTURE APPARATUS.

To the Editor of THE LANCET.

SIR:—In the numbers of THE LANCET dated Oct. 14th and 21st of last year, you published an interesting account of Mr. Liston's admirable treatment of fractures of the lower extremity, by Mr. Barker, that contains allusions to the splint invented by the late Mr. M'Intyre, of Newcastle, respecting which I will thank you to allow me space for a few words in reply. It was not till a few days ago, when the last half-yearly volume of your useful Journal came to me in the course of its circulation from the Wakefield Medical Library, that Mr. Barker's paper fell under my perusal, or I should certainly have addressed a rejoinder to you more immediately succeeding the remarks to which I allude.

Mr. Liston's splint for fractures of the leg, of which a detailed account, with two drawings, is given in the numbers of THE LANCET I have named is, no doubt, very well contrived for the purposes of hospital practice, but Mr. Liston and his commentator, Mr. Barker, must allow me to protest against the advantages which the latter asserts are possessed by Mr. Liston's over Mr. M'Intyre's splint; and I would particularly refer to the advantage first stated in Mr. Barker's essay, because the part of the splint alleged to be defective is, in my opinion, the very point of its chief merit; for it is here capable of accomplishing what no other contrivance had previously effected,—perfect immunity from the danger to which Mr. Barker adverts; and it is his apparent misconception of the powers of Mr. M'Intyre's instrument in this respect, which is my chief inducement to take up the subject.

At page 114 Mr. Barker says,—"I will now refer to a few advantages which that apparatus (Mr. Liston's) possesses over the one which was originally introduced by Mr. M'Intyre. First. By an improvement in Mr. Liston's apparatus, there is a space to admit the heel. It was frequently observed that abrasion of the skin of the heel occurred from the pressure to which that part was subjected, in consequence of the unyielding plate of iron beneath the paddings. * * * To remove this inconvenience Mr. Liston has left a space for the protrusion of the portion of the cushion beneath the heel." If there is not a hollowed space for the heel in the M'Intyre's splints used at the North London Hospital, they differ from any of the varieties Mr. M'Intyre employed during six years that I resided with him as pupil and assistant. If his splint be properly applied it is impossible that abrasion or ulceration of the heel can occur from pressure, because a sock is fitted on to the foot, and by means of a strap or a piece of tape passing from the sock over the point of the foot-board and fastened to a buckle or button on its lower surface, the weight of the foot is suspended; it is not merely "somewhat useful," as Mr. Barker details in page 86, "in detracting from the pressure upon the heel," but there is no pressure whatever on that part, in fact no cushion or other support is needed under the heel, except to prevent lateral motion. Should a sock or the foot of a stocking not be readily at hand, a loop of bandage passed under the heel and brought over the toes to the button will answer sufficiently well.

Mr. Barker complains, in the second place, that the angle at the kneejoint of Mr. M'Intyre's splint is liable to produce the same accident. Possibly it may, when the *chaff*-pillow on which the limb rests is not carefully adjusted to the form of the parts in contact with it. If that inconvenience *is* found to result, Mr. Liston's splint will avoid the risk: it is an accident, however, which, under Mr. M'Intyre's judicious management, I never witnessed in a very ample series of cases. A void space being left at the knee entirely precludes any use of the splint in fractures of the thigh, as it prevents that continued extension which may be and ought to be maintained in those cases.

"Third. In the new apparatus," Mr. Barker proceeds, "there is not a sliding thigh-

piece, because it is not adapted to fractures of the femur." To this remark I have no objection to urge, as it involves a principle of treatment respecting which it would be presumptuous in me to contradict the axioms of one of the first surgeons of the age. I may be permitted to observe, nevertheless, that after hearing Mr. Liston's opinions inculcated, when I had the pleasure of attending his course of lectures in 1825-6, and testing them by practice during a few succeeding years, I am far from being convinced that the double inclined splint, when properly applied, is not at least equally effective and much more easy to the patient than the long straight splint which Mr. Liston recommends.

The fourth advantage is stated to be "that the foot-board is more steady, and can be shifted more readily, inclined so as to bend or extend the foot, or increase the distance from the knee." In the splints used by Mr. M'Intyre the foot-boards were fixed in almost every possible variety of manner: hardly two were alike; but nearly all were made to bend or extend the foot at pleasure. In one specimen of the instrument (sent, I believe, to the Admiralty) of which a sketch is given in Mr. M'Intyre's pamphlet, a pivot was added, by means of which the foot could be inverted or everted, as well as flexed or extended to any allowable angle,

"Fifth. The plate that is placed transversely at the end is moveable. * * * In Mr. M'Intyre's it is fixed," according to Mr. Barker. Now, in most of Mr. M'Intyre's splints the cross-bar was *fastened merely* by a screw and moveable nut, so as to be altered at pleasure; the advantage alluded to is not very obvious.

Sixthly. Mr. Barker says, "the new apparatus is lighter, and more portable, and lastly, it is much less expensive." If its lightness consist in being made of sheet-iron, I would inform Mr. Barker that Mr. M'Intyre had several made of that material, but found them less convenient, less firm, and less agreeable (for private practice, at any rate,) than those made of wood; and *cæteris paribus*, they were not much less expensive. The sliding thigh-piece and the formation of the joint at the knee, are costly parts of the instrument, and, of course, in omitting them Mr. Liston considerably reduces its price, though, at the same time, it is deprived of a large share of its *intended* usefulness. As Mr. M'Intyre's splint may be readily taken in pieces, there cannot, I apprehend, be much difference on the score of portability.

I hope, Sir, these few remarks will be accepted by Mr. Barker, and by Mr. Liston, should he favour them with perusal, in the spirit in which they are offered; not as captious criticisms on the new splint, but as explanations regarding Mr. M'Intyre's apparatus, which I feel to be due to the memory of the deceased inventor; prompted, too, by my desire that the advantages of a system of treatment which appears to me so estimable, may be more fully understood by the profession, and more generally applied to benefit the unfortunate patients to whom it is applicable, than has hitherto been the case.

As a friend of Mr. M'Intyre, it is gratifying to me to find that these advantages are now highly appreciated in the hospital of my favourite alma mater, and their usefulness widely diffused by the students of that excellent school. My class-fellows in 1830 may recollect that I brought the machine under the notice of the University Medical Society, while I had the honour of being its president, and that we had before us on that occasion a modification of Mr. M'Intyre's splint, which had been then recently adopted by Mr. Key, at Guy's Hospital. That modification consists in the addition of a crutch when the splint is applied to a fractured thigh. If Mr. M'Intyre's plan be adopted of making the thigh-piece an inch or two longer than the fractured limb, and flexing the kneejoint rather more than usual, so as to suspend the weight of the pelvis in some measure from that joint, and thus keep up a constant gentle extension of the injured thigh, Mr. Key's crutch is not needed. Mr. M'Intyre used to object that it tended to throw the patient into a twisted position. That subject, however, is not quite relevant to my present comments, and therefore without extending them to greater length, I beg to subscribe myself, Sir, yours obliged,

T. G. WRIGHT, M.D., M.R.C.S., &c.

Wakefield, April 12, 1838.

FATAL

FALSE ANEURYSMAL TUMOUR

OCCUPYING NEARLY THE WHOLE OF

THE DUODENUM.

To the Editor of THE LANCET.

SIR:—Having, in No. 17 of THE LANCET for the present year, observed a case related by Dr. James Johnson, at the Westminster Medical Society, I beg to transmit you the following, which occurred to me a short time ago, and which in several particulars resembles that case. Your insertion of it in an early number of THE LANCET will much oblige your obedient servant,

JAMES M'LAUCHLAN.

Dumfries, April 24, 1838.

Mr. ———, ætat. 49, a gentleman of spare body and uniformly temperate habits, for the last twenty years has been subject to a malady, which was considered to be disease of the duodenum. The following is the history of his case previously to 1835, as related by

his late medical attendant:—Seventeen years before that date he was seized with the first attack, which was supposed to have been produced by cold. He then complained of pain in the region of the duodenum, vomiting, and obstinate constipation, attended by a dry state of the skin. He continued to complain in this manner, more or less, for nearly three months, and during that period was almost constantly confined to the house, and ever after occasionally suffered from paroxysms of a similar kind, having generally from two to four during the year, varying in severity and duration, but always continuing at least ten days. Since June, 1835, I had been in the habit of seeing him professionally, and after then, until the day of his death, he complained more or less of uneasiness at the stomach, and in the situation of the duodenum, with a feeling of obstruction there, and frequent vomitings; the bowels were generally constipated, but on two or three different occasions he had a diarrhœa. These symptoms were subject to paroxysms, but he was still able to attend to his professional avocations. For six or eight months previous to January last, the disease was evidently making progress, and his strength and flesh were declining rapidly. About the beginning of January the symptoms became aggravated, the vomitings increased in frequency, and there was then a solid tumour to be felt in the situation of the duodenum; the fluids rejected were in larger quantities, and varied in colour and consistence, sometimes resembling serum and at others coffee-grounds; the bowels were irregular; the stools tolerably healthy; the tongue dry; pulse 90. Four weeks afterwards he died.

Previously to 1835 it was found necessary to administer croton oil, in doses of four drops each, to remove the obstinate constipation, and during the attacks he had warm baths at a temperature so high as 120° Fah., which gave immediate relief. At that time also nothing was found to allay the vomiting so effectually as Fouler's solution of arsenic, given in doses of eight drops, three times a day. On the third or fourth day thereafter the vomiting generally subsided, when the medicine was discontinued. Since 1835 the same treatment had been continued, with the exception of the bowels only requiring gentle aperient medicine to move them. But during the last attack the hydrocyanic acid and muriate of morphia were tried to check the vomiting, but failed, and the solution of arsenic was again resorted to twenty-four hours before dissolution, and had the desired effect, but the patient sunk apparently from exhaustion.

Autopsy.—An examination of the chest and belly only was permitted, and was obliged to be performed hurriedly. In the chest the pleura of both cavities were found partially united by old adhesion. The lungs were healthy. The right side of the heart, and its left auricle in every respect were normal; the left ventricle being cut across, its cavity was observed to be very much diminished, and its walls were thickened; the hypertrophy was most remarkable in the septum; it measured one inch and three lines thick; the other parts of the walls of this cavity measured one inch and two lines at its base, and six lines at the apex. This ventricle formed at least two-thirds of the whole organ. Beneath the lining membrane of the aorta, and at the attachment of the aortic valves cartilaginous depositions were found, and similar depositions were observed in the two coronary arteries, but comparatively more extensive, and this more especially the case in the left. In the abdomen the stomach immediately presented itself as being of unusual dimensions; it had a contraction in the middle which gave the viscus very much the appearance of being double. Having been removed and distended with air, it lost in some measure its double appearance. The following are its measurements, viz.,—from the cardiac to the pyloric orifice, around its great curvature, two feet nine inches; between the same points along the smaller curvature, one foot one inch and a half; in circumference around its cardiac extremity, one foot four inches and a half; around the pyloric extremity, one foot; around the contraction ten inches; and round the viscus between the contraction and pyloric extremity, one foot two inches. A tumour was discovered in the duodenum: that portion of the intestine was therefore removed, and on dissecting away its attachments posteriorly much ecchymosis was noticed. The tumour occupied the whole of the second, and nearly the whole of the first portion of the duodenum, and was seated between the coats of its posterior surface; in shape and size it very much resembled a human kidney, and its bulk in a great measure filled the canal of the gut. On making a section of the tumour, it proved to be a false aneurysm, seated between the mucous and muscular coats. From what vessel the blood had escaped was not ascertained. The rest of the intestinal canal was healthy; liver a little enlarged; gall-bladder distended; pancreas normal; spleen small; both kidneys, but more especially the right one, indurated, small, and granular; the latter appearance seemed to arise from the atrophy of the cortical substance, a small serous cyst was observed on the surface of the right; ureters and bladder healthy; varus of the right foot.

Remarks.—The symptoms in this case led to the supposition that the stomach was the seat of chronic inflammation, and it was never conjectured that the pyloric orifice and the duodenum were affected with scirrhus. The pain and vomiting, and the sense of obstruction constantly complained of, are

satisfactorily explained by the pressure of the aneurysm, and the encroachment of the tumour on the cavity of the gut. There was no symptom of any affection in the chest, and therefore no suspicion of disease in that cavity was entertained; the secretion of urine was natural in quantity and appearance, nor was disease of those organs suspected. Could the aneurysm have been occasioned by the disease of the heart? Can any of your readers explain how the solution of arsenic acted in allaying the vomiting?

WESTMINSTER MEDICAL SOCIETY.

Saturday, April 29, 1838.

Mr. Hale Thomson, President.

SMALL-POX IN UTERO.—REMARKABLE DISEASES OF THE LARYNX AND TRACHEA.

Mr. Streeter stated, in allusion to a case which he had before related to the Society (p. 824, Vol. I. 1837-38), in which a child was born without any small-pox marks on the skin, though the mother had suffered from variola at the seventh month of pregnancy, that he had four times repeated the operation of vaccination without producing any effect on the infant. It was a matter of much interest to inquire whether this infant had passed through small-pox during its uterine life, and if so, why no marks of the disease presented themselves. Was this to be attributed to the influence of the prolonged warm bath the fœtus enjoys, respecting which Mr. Costello threw out a hint at a former meeting of the Society?

At the request of a member, Dr. Johnson detailed the following case:—A gentleman, 67 years of age, on suddenly removing from a warm to a cold atmosphere, while heated, was seized with difficulty of swallowing and breathing; he took some medicine, but without experiencing any relief, and the next day, Saturday, the 6th of April, Mr. Lawrence was called in. On examination there was no perceptible inflammation in the fauces or neighbourhood, the affection was thought to be slight, and a gargle, with opening medicines, was ordered. As the difficulty of respiration and deglutition continued to increase, he (Dr. Johnson) was called in on the following Tuesday. There were then evident marks of mechanical obstruction to the respiration, the countenance was pale and anxious, and there was great distress in breathing. It was agreed that laryngitis was present, and the most active means for its subduction were employed. General and local depletion, blisters, the free use of calomel, with other measures, were resorted to, without any impression being made on the symptoms; the difficulty of breathing and swallowing being on the increase. On Thursday it was evident that he was rapidly sinking, and the operation of laryngotomy was determined on. The patient immediately assented, and the operation was performed without producing any pain, or loss of blood. The opening, which was transverse, was made between the cricoid and thyroid cartilages. The gush of air which immediately followed would have blown out a dozen candles; the patient experienced instant relief, his breathing became tranquil, and he fell into a comfortable sleep which lasted an hour. He gradually sunk, however, without suffering or difficulty of breathing, and died five hours after the operation. On examining the body on the following day, there was no trace of inflammation, or any kind of disease below the opening into the larynx. The whole of the disease consisted in a deposition of lymph and matter around the pharynx, and about the rima glottidis, and upper part of the larynx; the epiglottis was still inflamed and hardened. He (Dr. J.) was of opinion that if the operation had been performed twelve or twenty-four hours before, the life of the patient might probably have been saved. This case inculcated in his (Dr. J.'s) mind, the necessary of operating early in similar instances.

Dr. L. Stewart inquired if belladonna was employed in the case just related; great stress had lately been laid on the efficacy of this remedy in affections of the throat.

Dr. Johnson said, that if the affection had been spasmodic, then belladonna might have been of advantage; but this was a case in which it was not likely to be beneficial.

Mr. Gregory Smith had examined a patient who, for a fortnight previous to his admission at a public institution, had suffered from severe difficulty of breathing and hoarseness. On admission, it was considered that he was labouring under ulceration of the glottis with œdema, and treated accordingly, by local and general bleeding, the administration of calomel, &c., but without benefit. The symptoms increased in severity, and tracheotomy was performed. For twelve hours after the operation he experienced much relief from his sufferings, but inflammation in the trachea came on, and he perished thirty-six hours after the operation. The thyroid and cricoid cartilages were found completely ossified, as were also the arytenoid cartilages, one of which had commenced exfoliating, and was merely lodged in a bag of ulcerated membrane. The epiglottis was thickened, and the glottis ulcerated. He had seen the same kind of disease in two other instances, in one of which tracheotomy was not performed, the difficulty of breathing lasted five weeks, and ended in suffocation. These were cases showing the occasional condition of

the larynx in old people, producing dyspnœa, and terminating in suffocation.

Mr. STREETER said, that tracheotomy was more likely to be successful in a case of an acute kind, like the one related by Dr. Johnson, than in the more chronic ones last detailed. He thought it an advisable plan, where tracheotomy was performed, particularly in acute affections, to abstain from the introduction of a tube for some time after. There was no necessity for its immediate use. He had seen two cases in which the trachea was opened in attempts at suicide, and in these no efforts were made to keep the wound open; it was only necessary in such cases to prevent the collection of blood, &c., about the external wound. So, in cases where tracheotomy was performed, the instant use of the tube was not required to keep a free passage for the air; the great irritation which would follow the introduction of a foreign body into the delicate air passage would be materially lessened, by waiting a short time, until a state of tolerance was produced.

Dr. BURGESS inquired whether, in those cases of spasm of the glottis, generally occurring in infants under one year of age, and threatening immediate asphyxia, the operation of laryngotomy would be advisable, or not, as a *dernier resource*. He believed, that there was no case on record of this operation having been resorted to in such instances; he did not see why it should not be as advisable in this spasmodic affection of children, as in any other case in which death seemed inevitable from suffocation. The objection generally made against operating at such an early age, had arisen from a dread of supervening convulsions; but, in the present instance, such an objection would be untenable.

Dr. JOHNSON said, that, whatever was the nature of the complaint in which immediate suffocation was threatened, he should not be averse to the performance of the operation. Of course, in spasmodic affections, where the obstruction to respiration might be only temporary, it would only be resorted to as a last resource.—The Society then adjourned till the third Saturday in October.

MEDICAL SOCIETY OF LONDON.

Monday, April 30, 1838.

Mr. BRYANT, President.

CHANCRES AND VENEREAL SORES OCCURRING IN STRUMOUS AND OTHER HABITS—USE AND ABUSE OF MERCURY—INFLUENCE OF HYDRIODATE OF POTASH IN PRIMARY AND SECONDARY SYPHILIS.

MR. DENDY wished to ask the opinion of members respecting the treatment of chancres. He had found, during the last three or four months, that chancres were particularly intractable, whether this might arise from the late production of a new kind of matter, or from a peculiarity in the atmosphere, he could not say. He had three cases of the true Hunterian chancre at present under his care, occurring in gentlemen of very excitable temperament, and in appearance very much inclined to struma. In one of these cases, which had been under his care for three weeks or a month, the patient had a chancre two years since, on which occasion mercury, to its full extent, was given, and the chancre appeared to yield. Extensive suppuration of all the inguinal glands on the right side, however, came on, and eventually they all sloughed away. The present sores were true chancres; they were circular, showing no disposition to heal; the edges were flat, neither inverted or everted, the largest being about a quarter of an inch in diameter, situated on the prepuce immediately covering the corona glandis, to which the ulceration had extended; the base was hard; there was no pain, except on the application of caustics, which was only once, and then very slightly used, and produced extreme pain; the granulations were scarcely worthy of the name; the discharge was purulent; he had no doubt, however, that the sores were venereal. In the case above related there was no enlargement of the glands at the present time; the patient had been under his care for three weeks, during which he had taken two grains of blue-pill and a quarter of a grain of opium, in the morning, and three grains of the pill, with half a grain of opium, at night. No bad results had followed this practice; but he (Mr. Dendy) had never seen so little local effect from a proper constitutional action of mercury. Might mercury do harm without appearing to be injurious? In chancres occurring in strumous habits was there any remedy more likely to be efficacious than mercury?

Mr. LEESE had used hydriodate of potash with much success in such cases.

Mr. KINGDON said, that for many years of his practice he had never seen a true Hunterian chancre, and only three "venereal" sores which required mercury, to the production of ptyalism, during a period of twelve years. Four or five years since the Hunterian sores became more frequent, and he found it necessary to give mercury until the cartilaginous kind of bases characteristic of these ulcers were removed. Another class of sores had lately become common, and in these the glands of the groin became rapidly affected; these sores occurred in constitutions in which he dreaded to give mercury. In one case, which harassed him very much, there was enlargement of the glands in both groins. He refrained from giving mercury. It occurred to him to ask questions about the urethra; there was nothing, however, particular about the passage of the water. He gave the patient

quinine and colocynth, bathed the ulcer with a weak solution of sulphate of copper, and passed a bougie, which produced extreme pain. At the expiration of two days the sore was better; the glands were less. He pursued the same plan of treatment, and the patient was soon well. An irritable state of the urethra would tend to the production of sores with hard edges and bases, and tended greatly to enlargement of the glands in the groin.

Mr. DENDY said, he knew of nothing to lead him to believe that the patient, he had referred to, had any affection of the urethra. He should try Mr. Kingdon's plan, but not with the same expectation of success as though he (Mr. Dendy) was not convinced his patient never had had gonorrhœa.

Mr. PILCHER said, it had fallen to his lot to see many sores which had been severely aggravated by the use of mercury. He had often been requested to see cases of "chancre and gonorrhœa," but he had never seen such a case. Cases supposed to be of this kind frequently depended on the aggravation of venereal sores by mercury, by which the discharge from them became so profuse that gonorrhœa was simulated. He had found, in such cases, that keeping the sores clean, and the use of purgatives, soon succeed in effecting a cure. He thought Mr. Dendy would succeed in curing the chancres in the cases he had related by the mode he was then pursuing. Regarding the Hunterian chancre, he believed its occurrence was exceedingly rare. Venereal sores (he used the term venereal to distinguish them from the Hunterian chancres) were, however, very common. He considered a sore which is painful, not so deep as a chancre, sometimes, but not often, with a hardened base, for this was no proof of its being a chancre, as the hardness might arise from common inflammation, extending more rapidly, except where the hardened base was present, than true chancre, the ulceration spreading from the glans to the prepuce, or from the prepuce to the glands, with great discharge and irritation, was a "venereal sore." He treated such cases with a small quantity of mercury, such as five grains of the blue-pill at night, and a black draught in the morning, with much success; remedies occasionally did harm. He had attended a gentleman with slight excoriation, for which he ordered a mild lotion of the sulphate of zinc; this, however, produced considerable inflammation and phymosis; the excoriation became painful, and took on all the characters of true venereal sore. Had this excoriation been left entirely alone it is probable that it would have done well. Of course, in this case, the effects were to be attributed to a peculiar idiosyncrasy of the patient. The advantage of keeping the bowels more than usually open in cases of venereal sores was very great. He had lately seen a gentleman who had been taking calomel for a sore of this kind; the ulcer became inflamed, and began to spread rapidly. Leaving off the calomel, and giving five grains of blue-pill at night, and a black draught in the morning for several days, soon cured the disease. It was interesting to inquire, what were the distinguishing marks of sores which produced secondary syphilis.

Mr. PROCTER thought the first inquiry in sores occurring on the penis was, that as to their being venereal or not, and then whether they required mercury, and if so, to what extent. If a disease be venereal can we trust to the mere alterative doses which were sufficient to control the sores? He could scarcely think venereal sores could be safely cured with five grains of blue-pill at night and a black draught in the morning, as recommended by Mr. Pilcher; if the sores were of the pseudo character pointed out by Mr. Abernethy, then the plan might be sufficient.

Mr. KINGDON considered that we might fairly allow that nineteen out of twenty of the sores which take place on the penis were "venereal," that is, resulting directly or indirectly from foul connection; but, of these, he thought we might as fairly admit, that nineteen out of twenty of them were not syphilitic, and did not require mercury. Though five grains of blue-pill at night, followed by a black draught in the morning, would not mercurialise a patient, still it would act on the constitution as an alterative. He believed, occasionally, that there was such an inaptitude in two constitutions to be subjected to the application of the secretions of each other, that a venereal sore might be produced from the connection of two persons otherwise pure; that a sore might be contracted from a woman not herself diseased, and communicated to her afterwards. In the case of a couple whom he had attended, the man had never had connection before his marriage, and there was not the slightest suspicion of the wife's purity. After being married about three months they became diseased, and they went on for six years infecting one another. They had several children who all died. These patients considered they were both dying of consumption. By invigorating the constitution, alterative doses of mercury, and keeping them apart for some time, the disease was cured, and on their again resuming cohabitation did not return.

Dr. T. THOMSON had not had much opportunity of judging of the relative effects of various kinds of treatment on primary sores, but he had many opportunities of judging of the effects of different kinds of treatment in preventing the occurrence of secondary symptoms. His experience was in favour of a mild but long-continued course of mercury. Cases in which secondary symptoms

occurred after the use of mercury, often arose from an inefficient quantity being given, or from its being used immoderately. He had seldom heard of cases of secondary symptoms where the mercury had been continued cautiously for some time. This was borne out, too, by the experience of many practitioners, particularly of Dr. Colles. He (Dr. T.) was fully aware of the danger even of small doses of mercury to some constitutions. The hydriodate of potash and mercury were kindred remedies, and, when given in combination, salivated much more rapidly than if the same quantity of mercury had been given alone. He thought he had seen cases in which hydriodate of potash had alone produced salivation. Regarding this remedy in some of the secondary symptoms, he could not speak too highly, particularly in cases of nodes and ulcerations. Was this remedy in strumous constitutions, as a substitute for mercury, to be depended upon in the treatment of primary sores?

Dr. L. Stewart had seen six cases in which hydriodate of potash had produced salivation when given for the cure of primary sores.

Mr. Crisp inquired how we were to distinguish between sores which were likely to produce secondary symptoms, and those that would not. As he thought it was almost impossible to decide on this difference with any degree of certainty, he made it a rule to slightly affect the gums with mercury in all doubtful cases. He gave mercury until the gums became slightly affected, and this affection he kept up for a fortnight. He had seen cases in which sores, not bearing the general characters of chancres, had produced most frightful secondary symptoms. By the plan persued by Mr. Pilcher, little or no mercurial action would be excited. Regarding the production of salivation by the hydriodate of potash, he had given Lugol's preparation to a woman who had a hard excrescence of one of the labia, supposed to be syphiltic. After giving the medicine for two months most profuse salivation had come on, and had continued to this time, a period of two years. No remedies he could apply were of any effect. The gums were not affected; there was no mercurial fœtor, but simply the remarkably increased secretion from the salivary glands.

Mr. Procter had himself been salivated by the hydriodate of potash: before the salivation came on the medicine produced vertigo. If hydriodate of potash was abused, it would occasionally produce bad symptoms.

Dr. Whiting thought when the mouth was rapidly affected by mercury, that keeping it tender for a fortnight only was not consistent with the safety of the patient; and he related a case, in which a patient who had adopted this plan of proceeding, on two or three occasions, suffered from secondary symptoms while taking mercury for another primary sore. In this instance, six grains of calomel, with two of iodine, mixed with bread crumbs, and divided into ten pills, one of which was given twice a day for a long period after the disappearance of the symptoms, effected a cure.

The President said, the difficulty of distinguishing the true nature of sores on the genitals, arose from the varied characters they assumed from the irritation produced by the contact of the clothes, and the variety of applications which were frequently applied to them, before they came under the eye of the surgeon, and which completely altered their original character. The application of caustic to sores on the genitals did much harm, and frequently gave rise to glandular enlargements. Sores on the penis could not be treated too tenderly, bathing them with decoction of poppies, or camomiles, was good treatment; even black wash was occasionally a source of of great irritation. The character of venereal sores was also modified by constitution. He thought the slow and quiet employment of mercury, with soothing local applications, the best treatment.

Mr. Dendy, in allusion to some observations which he made last week respecting Dr. Walker's mode of vaccinating, said, he wished to qualify their tendency. Dr. Walker frequently had so many patients in his vaccinating room, which was also very dark, that it was occasionally impossible for him to vaccinate properly. All cases in which severe inflammation followed vaccination did not depend on the mode in which the operation was performed; there was a peculiar diathesis in some children to the production of this inflammation.

WORK RECEIVED.

Abstract of a Lecture on Artificial Respiration, &c., by Sir James Murray, M.D., T.C.D.—[We regret that, for want of space, we cannot notice this week, the ingenious apparatus invented by Sir James Murray for the promotion of artificial respiration. Sir James, we understand, is at present in town, and is ready to explain the mode of using, and action of his air-pump to such members of the profession as may be desirous of obtaining information upon these points.]

TO CORRESPONDENTS.

S. R. C. Candidates for the Edinburgh degree must pass *one* season, at least, in Edinburgh. The expense will, of course, depend on the number of tickets taken out.

The observations of *Mr. G. A. Walker*, on a new mode of treating certain diseases of the skin, &c., have been received.